ʼΑΤΛΑΣ ΟΥΡΑ΄ΝΙΟΣ,
The COELESTIAL ATLAS;
OR, A NEW
EPHEMERIS
For the YEAR of our LORD 1791.

Being the third after
BISSEXTILE, or LEAP-YEAR.

Wherein are contained
The Heliocentrick and Geocentrick Places of the Planets,
the ECLIPSES of the Luminaries, and other remarkable PHÆNOMENA that will happen this Year.
Carefully computed
From the genuine TABLES of Dr. [illegible]ND HALLEY,
thoſe of Profeſſor MAYER, and other the [illegible] and moſt correct
ASTRONOMICAL TABLES.

BRITISH MUSEUM

ALSO
A Compleat ALMANACK, containing the FEASTS and FASTS
of the Church of ENGLAND; the Times of the LUNATIONS;
the Riſing and Setting of the Sun, Moon, and Planets, &c.
Adapted to the
Meridian and Latitude of the ancient and honourable
CITY of LONDON.
To which are added,
Several uſeful TABLES: As, a TABLE of the Sun's
ſemi-diurnal Arcs, by which the Times [illegible] Riſing and
Setting may be known by Inſpection, on ev[illegible] Year, and
in any Part of GREAT-BRITAIN or IREL[illegible]-TABLE,
and a very correct one of the Eclipſes of [illegible] firſt Satelies;
a TABLE of the Sun's Right-Aſcenſion; [illegible] TABLES of
the moſt remarkable fixed Stars, corrected [illegible]AMSTEED's
Catalogue; and, laſtly, a correct TAB[illegible] and Longitudes of the moſt remarkable Places in the World.

1791

By ROBERT WHITE,
Teacher of the Mathematicks.

ʼΟι ȣ̓ρανοὶ διηγȣ̃νται δόξαν Θεȣ̃.

The FORTY-SECOND IMPRESSION.

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Chronological Notes for the Year 1791.

Golden Number - -	6	Septuageſima Sund.	Feb.	20
Cycle of the Sun - -	8	Shrove Sunday -	Mar.	6
The Epact - - -	25	Eaſter Day - -	April	24
Dominical Letter -	B	Whit Sunday -	June	12
Number of Direction -	34	Trinity Sunday -		19
Roman Indiction - -	9	Advent Sunday -	Nov.	27

Aſtronomical CHARACTERS explained.

♈	Aries	♋	Cancer	♎	Libra	♑	Capricorn
♉	Taurus	♌	Leo	♏	Scorpio	♒	Aquarius
♊	Gemini	♍	Virgo	♐	Sagitary	♓	Piſces

♄	Saturn	☉	Sol (the Sun)	☽	Luna (the Moon)	♅	Herſchel, the New or Georgian Planet.
♃	Jupiter	♀	Venus	☊	Moon's N. Node		
♂	Mars	☿	Mercury	☋	her S. Node		

☌ Conjunction when Planets are in the ſame Sign, Deg. Min. &c.

✱ Sextile when 2 Signs diſt.	△ Trine when 4 Signs diſt.
□ Quartile when 3 Signs diſt.	☍ Oppoſition when 6 Signs diſt.

Of the Four Quarters of the YEAR 1791.

		d	h	m	
THE Spring Quarter begins - -	March	20	3	34	aftern.
The Summer Quarter begins - -	June	21	1	37	aftern.
The Autumnal Quarter begins - -	Sept.	23	3	15	morn.
The Winter Quarter begins - -	Dec.	21	7	46	aftern.

THE beautiful Planet VENUS will be an Evening Star 'till October the 19th; and after that Time ſhe will be a Morning Star to the Year's End.

JUPITER will be a Morning Star 'till the 17th Day of March, then an Evening Star till the 4th of October, at which Time he becomes a Morning Star, and ſo continues to the Year's End.

The NAMES of the Learned JUDGES of the LAW.

The Right Hon. Lord Thurlow, Lord High Chancellor.

Right Honourable Sir Richard Pepper Arden, Knt. Maſter of the Rolls.

. In the } Right Hon. Lord Kenyon, L. C. J. Sir W. H. Aſhurſt, Knt.
. Bench. } Sir Francis Buller, Bart. Sir Naſh Groſe, Knt.

I. In the } R. H. Alex. Lord Loughborough, L. C. J. Sir Henry Gould, Knt.
. Pleas. } John Heath, Eſq; Sir John Wilſon, Knt.

V. In the } Sir James Eyre, Knt. L. C. B. Sir Beaumont Hotham, Knt.
xchequer } Sir Richard Perryn, Knt. Sir Alex. Thompſon, Knt.

ir Alex. M'Donald, Knt. Attor. General; Sir John Scott, Knt. Solic. Gen.

A TABLE of TERMS and Returns for the Year 1791.

Hilary Term begins Jan. 24, ends Feb. 12.

Returns or Eſſoign-days.		Exc.	Ret.	Ap.	W. D.
eight Days of St. Hilary, - -	Jan. 20	21	22	24	Mond.
fifteen Days of St. Hilary - - -	27	28	29	31	Mond.
n the Mor. of the Purif. of the Bl. V. M.	Feb. 3	4	5	7	Mond.
eight Days of the Purif. of the Bl. V. M.	9	10	11	12	Saturd.
Eaſter Term begins May 11, ends June 6.					
fifteen Days of Eaſter - -	May 8	9	10	11	Wedn.
om Eaſter Day in three Weeks -	15	16	17	18	Wedn.
om Eaſter Day in one Month - -	22	23	24	25	Wedn.
om Eaſter Day in five Weeks - -	29	30	31	J. 1	Wedn.
n the Mor. of the Aſcenſion of the Lord	June 3	4	5	6	Monday
Trinity Term begins June 24, ends July 13.					
n the Morrow of the Holy Trinity, -	June 20	21	22	24	Friday.
eight Days of the Holy Trinity, -	26	27	28	29	Wedn.
fifteen Days of the Holy Trinity,	July 3	4	5	6	Wedn.
om the Day of the Holy Trin. in 3 Weeks	10	11	12	13	Wedn.
Michaelmas Term begins Nov. 7, ends Nov. 28.					
the Morrow of All Souls - - - -	Nov. 3	4	5	7	Mond.
the Morrow of St. Martin - - - -	12	13	14	15	Tueſday
eight Days of St. Martin - - -	18	19	20	21	Mond.
fifteen Days of St. Martin - - - - -	25	26	27	28	Mond.

N. B. No Sittings in Weſtminſter-Hall on the Second of February, ſcenſion-day, and Midſummer-day.

The Exchequer opens eight Days before any Term begins, except Trinity, fore which it opens but four Days.

Note, The firſt and laſt Days of every Term, are the firſt and laſt ys of Appearance.

BIRTH-DAYS of the ROYAL FAMILY.

KING GEORGE III. June 4,	1738	Prince Aug. Fred. Jan. 27,	177
Prince of Wales, Aug. 12,	1762	Prince Adolph. Fred. Feb. 24,	177
Prince Frederick, Aug. 16,	1763	Princeſs Mary, April 25, -	177
Prince Wm. Henry, Aug. 21,	1765	Princeſs Sophia, Nov. 3, -	177
Prs. Cha. Aug. Mat. Sept. 29,	1766	Princeſs Amelia, Aug. 7, -	178
Prince Edward, Nov. 2, -	1767	Queen Charlotte, May 19,	174
Prs. Auguſta Sophia, Nov. 8,	1768	Prs. Auguſta of Brun. Aug. 11,	173
Prs. Elizabeth, May 22, -	1770	Duke of Glouceſter, Nov. 25,	174
Prince Erneſt Auguſtus, June 5,	1771		

SOVEREIGNS of EUROPE, their Acceſſion, &c.

Kingdoms, &c.	To whom ſubject.	When born.		Began to reign	
England, &c.	George III.	June 4,	1738	Oct. 25,	176
France	Lewis XVI.	Aug. 23,	1754	May 10,	177
Ruſſia	Catharine II.	May 2,	1729	July 9,	176
Spain	Charles IV.	Nov. 11,	1748	Dec. ,	178
Portugal	Mary	Dec. 7,	1734	Feb. 24,	177
Pruſſia	Frederic IV.	Sept. 25,	1744	Aug. 17,	178
Denmark & Norway	Chriſtian VII.	Jan. 29,	1749	Jan. 14,	176
Sweden	Guſtavus III.	Jan. 24,	1746	Feb. 13,	177
Germany	Leopold	May 5,	1747		179
Poland	Staniſlaus III.	Jan. 17,	1732	Nov. 25,	176
Holland	William V.	March 8,	1748	Oct. 11,	175
Popedom	Pius VI.	Dec. 27,	1717	Feb. 18,	177
Sardinia	Victor	June 26,	1726	Mar. 20,	177
Ottoman Empire	Selim III.		1761	April 7,	178

The FULL WEIGHT of the Coins, with the LEAST WEIGHT allowed to paſs of the Gold Coin.

	Wt. allowed.		Full Wt.			Full W	
GOLD.	dwt.	gr.	dwt.	gr.	SILVER.	dwt.	gr.
Guinea, - -	5	8	5	$9\frac{39}{89}$	A Crown, - -	19	$8\frac{1}{3}$
Half Guinea, -	2	16	2	$16\frac{64}{89}$	Half Crown, -	9	$16\frac{}{3}$
Quarter Guinea,	1	8	1	$8\frac{32}{89}$	Shilling, - -	3	$20\frac{2}{3}$
					Six Pence, - -	1	$22\frac{1}{3}$

According to the above proportions it appears, that the value of a *lb.* ſilver is 62 s. or 3 l. 2 s. and of a *lb.* of gold is 44½ guineas, or 46 l. 14 6 d. Alſo that the *oz.* of ſilver is 5 s. 2 d. and the *oz.* of gold 3 l. 17 10½ d. So that the value of the ſtandard gold is 15 times that of the ſilve and 1-14th more.

TABLE of the KINGS and QUEENS of ENGLAND ſince the CONQUEST.

Kings and Queens	Born A.D.	Began their Reign			Reigned			Age	Rem. Deaths and Dethroned	Where buried
					Y.	M.	D.			
Will. Conq.	1027	1066	Oct.	14	20	10	26	60	Burſt by Leap.	Caen, Norm
Will. Rufus	1057	1087	Sept.	9	12	10	24	43	Slain accidentally.	Wincheſter
Henry I.	1068	1100	Aug.	2	35	3	29	77		Reading
tephen	1105	1135	Dec.	1	18	10	24	49		Feverſham
Henry II.	1133	1154	Oct.	25	34	8	11	55		Fonteveraud
Richard I.	1156	1189	July	6	9	9	0	43	Slain with an Arrow.	Fonteveraud
ohn	1165	1199	April	6	17	6	13	50		Worceſter
Henry III.	1207	1216	Oct.	19	56	0	28	65		Weſtminſter
Edward I.	1239	1272	Nov.	16	34	7	21	67		Weſtminſter
Edward II.	1284	1307	July	7	19	6	18	43		Glouceſter
Edward III.	1312	1327	Jan.	25	50	4	27	65		Weſtminſter
Richard II.	1366	1377	June	21	22	3	8	33	Dep. & murd.	Weſtminſter
Henry IV.	1367	1399	Sept.	29	13	5	20	46		Canterbury
Henry V.	1389	1413	Mar.	20	9	5	11	33		Weſtminſter
Henry VI.	1421	1422	Aug.	31	38	6	4	49	Dep. & murd.	Windſor
Edward IV.	1442	1461	Mar.	4	22	1	5	41		Windſor
Edward V.	1471	1483	April	9	0	2	15	12	Murder'd.	Not known
Richard III.	1443	1483	June	22	2	2	0	42	Slain in Battle.	Leiceſter
Henry VII.	1456	1485	Aug.	22	23	8	0	52		Weſtminſter
Henry VIII.	1492	1509	April	22	37	9	6	55		Windſor
Edward VI.	1537	1547	Jan.	28	6	5	8	15		Weſtminſter
Mary I.	1516	1553	July	6	5	4	11	42		Weſtminſter
Elizabeth	1533	1558	Nov.	17	44	4	7	69		Weſtminſter
James I.	1566	1603	Mar.	24	22	0	3	58		Weſtminſter
Charles I.	1600	1625	Mar.	27	23	10	3	48		Windſor
Charles II.	1630	1649	Jan.	30	36	0	7	54		Weſtminſter
James II.	1633	1685	Feb.	6	4	0	7	67	Abdicated.	St. Germain
Mary II.	1662	1689	Feb.	13	5	10	15	32		Weſtminſter
William III.	1650	1689	Feb.	13	13	0	23	52		Weſtminſter
Anne	1665	1702	Mar.	8	12	4	24	49		Weſtminſter
George I.	1660	1714	Aug.	1	12	10	10	67		Hanover
George II.	1683	1727	June	11	33	4	14	77		Weſtminſter
George III.	1738	1760	Oct.	25	Crowned Sept. 22, 1761.					

Above you view the Riſe and Fall of Kings,
Whoſe Fate ſometimes a uſeful Leſſon brings.
Well if all Men could profit from the paſt!
Each know his Duty, each excel the laſt,
And juſtly execute his ſtated Taſk.

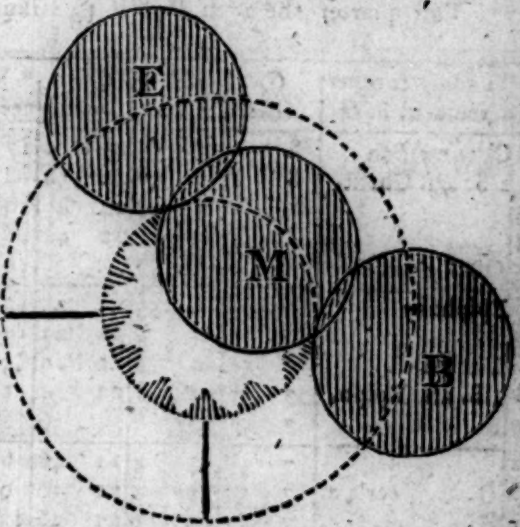
A Table of the moſt Reverend, Right Reverend, and Reverend, the Archbiſhops, Biſhops and Deans exerciſing Eccleſiaſtical Juriſdiction, 1791.

Biſhops.	Sees.	Date.	Succeeded.	Deans.
Dr. John Moore	*Bangor*	1775	Ewer deceaſed	
Arch-Biſhop	Canterb. A. B	1783	Cornwallis dec.	Dr. Buller
Dr. Will. Markham	*Cheſter*	1771	Keene tranſlat.	
Arch-Biſhop	York A. B.	1777	Drummond de.	Dr. J. Fountayne
Dr. Beilby Porteus	*Cheſter*	1776	Markham tran.	
	London	1787	Lowth deceaſ.	Biſhop Pretyman
Dr. Tho. Thurlow	*Lincoln*	1779	Green dec.	
	Durham	1787	Egerton dec.	Biſhop Hinchliffe
Hon. Dr. B. North	*Litch & Cov.*	1771	Egerton tranſl.	
	Worceſter	1774	Johnſon deceaſ.	
	Wincheſter	1781	Thomas deceaſ.	Dr. Newton Ogle
Sir W. Aſhburnham	Chicheſter	1754	Mawſon tranſl.	Mr. Combe Miller
Dr. Charles Moſs	*St. David's*	1766	Lowth tranſl.	
	Bath & Wells	1774	Willes deceaſe	Ld. Fr. Seymour
Dr. S. Barrington	*Landaff*	1769	Shipley tranſl.d	
	Saliſbury	1782	Hume dec.	Dr. John Ekins
Dr. John Hinchliffe	Peterborough	1769	Lamb dec.	Dr. Ch. Tarrant
H. Dr. James Yorke	*St. David's*	1774	Moſs tranſl.	
	Glouceſter	1779	Warburton dec.	
	Ely	1781	Keene deceaſed	Dr. W. Cooke
Dr. John Thomas	Rocheſter	1774	Pearce dec.	Dr. T. Dampier
Dr. Richard Hurd	*Litch. & Cov.*	1775	B. North tr.	
	Worceſter	1781	B. North tr.	Ho. St. A. St. John
Dr. John Butler	*Oxford*	1777	Lowth tranſl.	
	Hereford	1788	Harley deceaſ.	Dr. N. Wetherell
Dr. John Roſs	Exeter	1778	Keppel dec.	Dr. C. Harward
Dr. John Warren	*St. David's*	1779	Yorke tranſl.	
	Bangor	1783	Moore tranſl.	Dr. Tho. Lloyd
Dr. J. Cornwallis	Litch. & Cov.	1781	Hurd tranſl.	Dr. Bapt. Proby
Dr. Lewis Bagot	*Briſtol*	1782	Newton dec.	
	Norwich	1783	Yonge dec.	
	St. Aſaph	1790	Hallifax dec.	Mr. W. D. Shipley
Dr. Richard Watſon	Landaff	1782	Barrington tr.	Dr. R. Price, Pr.
Dr. Edward Smalwell	*St. David's*	1783	Warren tranſl.	
	Oxford	1788	Butler tranſl.	Dr. Cyril Jackſon
Dr. Chriſt. Wilſon	Briſtol	1783	Bagot tranſl.	Dr. John Hallam
Dr. G. Pretyman	Lincoln	1787	Thurlow tran.	Sir Ri. Kaye, Bt.
Dr. John Douglas	Carliſle	1787	Law dec.	Dr. Jeffery Ekins
Dr. William Cleaver	Cheſter	1788	Porteus tran.	Dr. G. Cotton
Dr. Samuel Horſley	St. David's	1788	Smalwell tr.	Mr. Wollaſton, P.
Dr. Richard Beadon	Glouceſter	1789	Hallifax tran.	Dr. Joſiah Tucker
Dr. George Horne	Norwich	1790	Bagot tran.	Dr. Joſeph Turner
	Weſtminſter	1768		Biſhop Thomas
Dr. Claudius Crigan	Sodor & Man	1784	Maſon dec.	
	Windſor	1788		Biſhop Douglas

In the courſe of this year there will happen Four eclipſes, two of the Sun and two of the Moon; one of each luminary being viſible in theſe parts. The times and circumſtances are as follow:

I. April 3d in the afternoon, ☉ eclipſed viſible:

Type of the Eclipſe.



Times, &c. afternoon.

		h.	m.
Beginning, B	-	0	17
Middle, M	-	1	46
End, E	- -	3	9
Duration	-	2	52

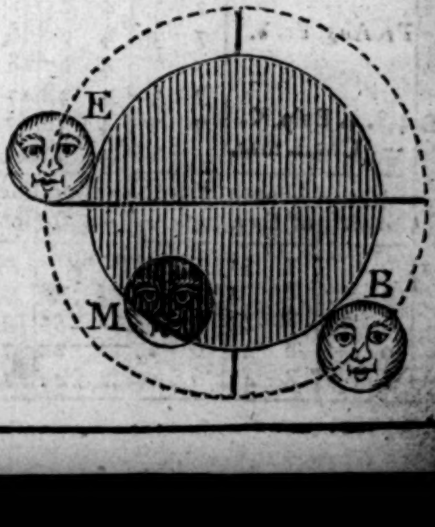
Digits eclipſed 7° 16′ on the ſun's northern limb. And the moon makes the firſt impreſſion on the ſolar diſc at 6° below the ſun's horizontal diameter on the right hand.—This eclipſe is viſible to all Europe, part of Aſia, Africa, and America. At Iceland and other parts north of Scotland, it will be annular.

II. April 18th in the afternoon, the Moon will be eclipſed, but inviſible, becauſe the moon is not then riſen, though viſible to all the ſouthern parts of the world. The beginning is at 3h. 15m.; the middle at 4h. 42m.; and the end at 6h. 9m.; the digits eclipſed being 9° 24′, on the moon's ſouth limb.

III. September 27th the Sun is eclipſed, but inviſible here, though viſible to the iſles of the great ſouth ſea. The conjunction is at 11h. 43m. in long. 6s 4° 46′, the moon's lat. being 44′$\frac{2}{3}$ ſouth. And the ſun will be centrally eclipſed on the meridian at 12h. 15$\frac{1}{2}$m. in long. 176° 7$\frac{1}{2}$′ eaſt, and lat. 54° ſouth.

IV. October 11, the Moon's eclipſed, after 12 at night, or early the morning of October 12, and viſible here.

TYPE.



Times, &c.

		h.	m.
Beginning, B	-	12	0
Middle, M	- -	13	36
End, E	- -	15	12

Digits eclipſed 9° 17′ on the moon's north limb. The eclipſe is viſible to all Europe, great part of Africa and America, with the Weſt and Eaſt Indies, &c.

The Lunations.

New Moon the 4th day, at 33 minutes paſt 4 afternoon.
Firſt quarter the 12th day, at 38 minutes paſt 5 morning.
Full Moon the 20th day, at 48 minutes paſt 5 morning.
Laſt quarter the 27th day, at 13 minutes paſt 7 morning.

M D	Sundays & other remark. days	☉ riſes	☉ ſets	☉'s declin.	☽'s declin.	☽ riſes & ſets	☽ ſouth	Clock bef. ☉
1	Circumciſion	8 5	3 55	23 s 0	17 s 18	4 m 7	8 m 49	4′ 8″
B	2 S. aſt. Chriſt.	8 4	3 56	22 54	18 50	5 18	9 48	4 36
3		8 3	3 57	22 49	19 7	6 24	10 47	5 4
4		8 3	3 57	22 42	18 9	☽ ſets	11 46	5 32
5	Old Chriſt. Day	8 2	3 58	22 36	16 4	5 a 32	0 a 43	5 59
6	Epiphany	Tw.day	3 59	22 29	13 6	6 44	1 36	6 25
7		8 0	4 0	22 21	9 31	7 53	2 26	6 51
8	Lucian	7 59	4 1	22 13	5 35	9 0	3 13	7 17
B	1 S. aſt. Epiph.	7 58	4 2	22 4	1 30	10 7	3 58	7 42
10	Plow Monday	7 57	4 3	21 56	2 n 32	11 12	4 42	8 6
11		7 56	4 4	21 46	6 22	morn.	5 25	8 30
12	O. N. Year's d.	7 55	4 5	21 36	9 55	0 16	6 8	8 54
13	Hila. Cam. T.b.	7 54	4 6	21 26	13 2	1 18	6 52	9 16
14	Oxf. Term beg.	7 53	4 7	21 16	15 37	2 18	7 37	9 38
15		7 52	4 8	21 5	17 34	3 16	8 24	9 59
B	2 S. af. Epiph.	7 51	4 9	20 53	18 4	4 13	9 12	10 20
17	Old Twe. Day	7 49	4 11	20 42	19 6	5 7	10 2	10 39
18	Q. Char. b. d. k.	Priſca	4 12	20 29	18 31	5 53	10 52	10 58
19		7 47	4 13	20 17	16 59	6 35	11 43	11 17
20	Fabian	7 45	4 15	20 4	14 32	☽ riſes	morn	11 34
21	Agnes	7 44	4 16	19 51	11 1	6 a 21	0 34	11 51
22	Vincent	7 42	4 18	19 37	7 26	7 33	1 24	12 7
B	3 S. aft. Epiph.	7 4	4 1	19 23	3 7	8 45	2 14	12 22
24	Hil. Term beg.	7 40	4 20	19 8	1 s 24	10 0	3 4	12 37
25	Con. of St. Paul	7 38	4 22	18 54	5 52	11 15	3 5	12 50
26		7 37	4 23	18 39	10 2	morn.	4 46	13 3
27	Pr. Aug. Fr. b.	7 35	4 25	18 23	13 40	0 3	5 39	13 15
28		7 3	4 27	18 7	16 29	1 4	6 34	13 27
29		7 32	4 28	17 51	18 19	2 55	7 31	13 37
B	4 S. a. Ep'p. K. [Cha. I. mar.	7 30	4 30	17 35	19 1	4 1	8 28	13 47
31		7 28	4 32	17 18	18 31	4 57	9 25	13 56

Days	Day ncreaſ.	Length of Day.	Helioc. long. ♄	Helioc. long. ♃	Helioc. long. ♂	Helioc. long ⊖	Helioc long. ♀	Helioc. long. ☿	♄ ſets.
1	0 7	7 51	5 ♈ 51	21 ♍ 0	6 ♒ 3	11 ♋ 8	10 ♑ 46	18 ♒ 10	11 a 5
7	0 17	8 1	6 3	21 27	9 48	17 15	20 15	1 ♓ 53	10 42
13	0 29	8 13	6 15	21 54	13 34	23 22	29 44	10 ♈ 14	10 19
19	0 43	8 27	6 28	22 22	17 21	29 2	9 ♒ 13	13 ♉ 53	9 56
25	1 1	8 45	6 40	22 49	21 9	5 ♌ 35	18 42	21 ♊ 14	9 22

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. ☽'s node	♄'s latitude	♃'s latitude	♂'s latitude	♀'s latitude	☿'s latitude
1	5 59	6 1	2 10	27♎17	2 s 22	1 n 19	1 s 5	0 s 38	2 s 8
7	5 56	6 4	2 9	26 58	2 21	1 21	1 6	0 50	1 54
13	5 52	6 8	2 7	26 3	2 20	1 22	1 6	1 1	1 15
19	5 46	6 14	2 5	26 19	2 19	1 24	1 6	1 11	0 5
25	5 39	6 21	2 3	26 0	2 18	1 26	1 5	1 18	1 n 34

Days	☉'s longitude	☽'s long.	☽'s latitude	♄'s long.	♃'s long.	♂'s long.	♀'s long.	☿'s long.
1	♑11 8 8	28♏ 6	2 n 31	0♈ 0	1♎16	25♑46	10♑59	21♑42
B	12 9 20	12♐41	3 32	0 3	1 19	26 33	12 14	23 20
3	13 10 33	27 14	4 19	0 7	1 21	27 20	13 30	24 58
4	14 11 45	11♑41	4 49	0 10	1 23	28 7	14 45	26 36
5	15 12 57	25 53	5 1	0 14	1 25	28 54	16 1	28 14
6	16 14 9	9♒45	4 54	0 17	1 27	29 41	17 16	29 51
7	17 15 20	23 13	4 31	0 21	1 29	0♒29	18 32	1♒28
8	18 16 31	6♓17	3 55	0 24	1 30	1 16	19 47	3 4
B	19 17 42	18 57	3 7	0 28	1 31	2 3	21 3	4 39
10	20 18 52	1♈17	2 12	0 32	1 32	2 50	22 18	6 12
11	21 20 1	13 21	1 12	0 36	1 33	3 37	23 34	7 44
12	22 21 9	25 14	0 9	0 41	1 34	4 24	24 49	9 14
13	23 22 16	7♉ 1	0 s 53	0 45	1 35	5 12	26 5	10 41
14	24 23 23	18 50	1 53	0 50	1 35	5 59	27 20	12 5
15	25 24 28	0♊44	2 49	0 54	1 36	6 46	28 36	13 26
B	26 25 33	12 48	3 37	0 59	1 R 36	7 34	29 51	14 44
17	27 26 37	25 6	4 17	1 3	1 35	8 21	1♒ 6	15 56
18	28 27 40	7♋40	4 44	1 8	1 35	9 8	2 22	17 3
19	29 28 42	20 31	4 59	1 12	1 34	9 56	3 37	18 5
20	♒ 0 29 43	3♌39	4 57	1 17	1 33	10 43	4 52	18 59
21	1 30 43	17 1	4 40	1 22	1 32	11 31	6 8	19 45
22	2 31 43	0♍36	4 7	1 27	1 30	12 18	7 23	20 23
B	3 32 42	14 20	3 19	1 32	1 29	13 6	8 38	20 51
24	4 33 40	28 12	2 18	1 37	1 28	13 53	9 54	21 8
25	5 34 38	12♎ 8	1 0	1 42	1 26	14 41	11 9	21 R 15
26	6 35 35	26 9	0 n 4	1 47	1 24	15 28	12 24	21 11
27	7 36 32	10♏13	1 18	1 53	1 22	16 16	13 39	20 55
28	8 37 28	24 19	2 27	1 58	1 19	17 3	14 55	20 28
29	9 38 23	8♐27	3 28	2 4	1 17	17 51	16 10	19 50
B	10 39 17	22 36	4 15	2 9	1 14	18 38	17 25	19 3
31	11 40 11	6♑41	4 47	2 15	1 12	19 25	18 41	18 6

Days	♃ riſes	♂ ſets	♀ ſets	☿ ſets	♄'s declin.	♃'s declin.	♂'s declin.	♀'s declin.	☿'s declin.
1	11 a 14	5 a 4	3 a 51	4 a 36	2 s 11	0 n 42	22 s 5	23 s 39	23 s 50
7	10 44	5 5	4 2	5 0	2 1	0 39	21 8	23 2	21 43
13	10 18	5 6	4 15	5 35	1 50	0 37	20 3	21 58	18 47
19	9 53	5 7	4 30	5 46	1 39	0 40	18 50	20 31	15 30
25	9 28	5 8	4 47	5 57	1 26	0 44	17 20	18 42	12 57

The Lunations.

New Moon	the 3d	day, at 39	minutes paſt	5 morning.
Firſt quarter	the 11th	day, at 30	minutes paſt	3 morning.
Full Moon	the 18th	day, at 56	minutes paſt	7 night.
Laſt quarter	the 25th	day, at 57	minutes paſt	2 afternoon.

M D	Sundays & other remark. days	☉ riſes	☉ ſets	☉'s declin	☽'s declin.	☽ riſes & ſets	☽ ſouth	Clock bef. ☉
1		7 27	4 33	17 s 1	16 s 55	5 m 42	10 m 22	14′ 4″
2	Purif. Candlem.	7 25	4 35	16 44	14 21	6 25	11 16	14 11
3	Blaſe	7 23	4 37	16 26	11 3	☾ ſets	0 a 7	14 17
4		7 22	4 38	16 8	7 16	6 a 33	0 56	14 23
5	Agatha	7 20	4 40	15 50	3 14	7 40	1 43	14 28
B	5 Sun. af. Epi.	7 18	4 42	15 32	0 n 51	8 48	2 28	14 32
7		7 16	4 44	15 13	4 48	9 53	3 12	14 35
8		7 14	4 46	14 54	8 29	10 55	3 56	14 37
9		7 13	4 47	14 35	11 46	11 56	4 40	14 39
10		7 11	4 49	14 15	14 33	morn	5 25	14 40
11		7 9	4 51	13 56	16 44	0 58	6 11	14 40
12	Hil. Term ends	7 7	4 53	13 36	18 12	1 56	6 59	14 39
B	6 Sun. af. Epi.	)Ca. D	4 55	13 16	18 52	2 52	7 48	14 37
14	Valentine	7 3	4 57	12 55	18 40	3 40	8 38	14 35
15		7 1	4 59	12 35	17 32	4 25	9 29	14 31
16		7 0	5 0	12 14	15 29	5 4	10 20	14 27
17		6 58	5 2	11 53	12 33	5 40	11 12	14 23
18		6 56	5 4	11 32	8 53	☽ riſes	morn	14 17
19		6 54	5 6	11 10	4 40	6 a 26	0 4	14 11
B	Septuageſima S.	6 52	5 8	10 49	0 7	7 42	0 55	14 5
21		6 50	5 10	10 27	4 s 28	8 58	1 47	13 57
22		6 48	5 12	10 6	8 49	10 16	2 40	13 49
23		6 46	5 14	9 44	12 39	11 32	3 34	13 41
24	St. Matthias Pr.	6 44	5 16	9 21	15 42	morn	4 30	13 32
25	{A. F. b.	6 42	5 18	8 59	17 46	0 49	5 27	13 22
26		6 40	5 20	8 37	18 45	1 56	6 24	13 12
B	Sexageſima S.	6 38	5 22	8 14	18 34	2 53	7 21	13 1
28		6 36	5 24	7 52	17 18	3 40	8 16	12 50

Days	Day increaſ.	Length of day	Helioc. long. ♄	Helioc. long. ♃	Helioc. long ♂	Helioc. long. ⊖	Helioc. long. ♀	Helioc. long. ☿	♄ ſets
1	1 23	9 7	6♈54	23♍21	25♒35	12♌41	29♒47	3♌40	9 a 7
7	1 45	9 29	7 6	23 49	29 23	18 46	9♓18	4♍45	8 46
13	2 7	9 51	7 19	24 16	3♓12	24 50	18 49	0♎25	8 26
19	2 29	10 13	7 31	24 43	7 0	0♍52	28 20	21 57	8 7
25	2 52	10 36	7 43	25 11	10 49	6 54	7♈53	10♏45	7 49

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. ☽'s node	♄'s latitude	♃'s latitude	♂'s latitude	♀'s latitude	☿'s latitude
1	5 31	6 30	2 0	25♎38	2 s 16	1 n 28	1 s 5	1 s 24	3 n 20
7	5 22	6 39	1 59	25 19	2 16	1 29	1 4	1 27	3 38
13	5 12	6 48	1 57	25 0	2 15	1 30	1 3	1 28	2 46
19	5 0	7 0	1 57	24 [illegible]	2 14	1 32	1 1	1 26	1 31
25	4 50	7 10	1 56	24 22	2 13	1 33	1 0	1 22	0 19

Days	☉'s longitude	☽'s long.	☽'s latitude	♄'s long.	♃'s long.	♂'s long.	♀'s long.	☿'s long.
1	♒12 41 3	20♑40	5 n 1	2♈20	1♎ 9	20♒13	19♒56	17♒ 3
2	13 41 54	4♒28	4 57	2 26	1 6	21 1	21 11	15 56
3	14 42 44	18 0	4 37	2 32	1 2	21 48	22 26	14 4[illegible]
4	15 43 33	1♓15	4 2	2 38	0 59	22 36	23 42	13 32
5	16 44 21	14 11	3 15	2 44	0 55	23 23	24 57	12 21
B	17 45 7	26 46	2 19	2 50	0 51	24 11	26 12	11 12
7	18 45 52	9♈ 4	1 18	2 56	0 47	24 58	27 27	10 7
8	19 46 35	21 8	0 15	3 2	0 43	25 46	28 42	9 8
9	20 47 16	3♉ 2	0 s 49	3 8	0 38	26 33	29 57	8 15
10	21 47 55	14 50	1 50	3 14	0 34	27 20	1♓13	7 30
11	22 48 32	26 39	2 46	3 21	0 29	28 8	2 28	6 53
12	23 49 8	8♊33	3 36	3 27	0 24	28 55	3 43	6 24
B	24 49 42	20 39	4 16	3 34	0 19	29 42	4 5	6 3
14	25 50 14	3♋ 0	4 46	3 40	0 14	0♈30	6 13	5 50
15	26 50 44	15 40	5 3	3 47	0 8	1 [illegible]	7 28	5 D44
16	27 51 12	28 42	5 4	3 53	0 3	2 5	8 43	5 44
17	28 51 39	12♌ 4	4 50	4 0	29♍57	2 52	9 58	5 51
18	29 52 4	25 47	4 18	4 6	29 52	3 40	11 12	6 4
19	♓ 0 52 27	9♍46	3 30	4 13	29 46	4 27	12 27	6 24
B	1 52 49	23 57	2 29	4 19	29 40	5 15	13 42	6 50
21	2 53 9	8♎15	1 18	4 26	29 34	6 2	14 57	7 21
22	3 53 27	22 36	0 1	4 33	29 28	6 49	16 12	7 55
23	4 53 44	6♏55	1 n 15	4 40	29 21	7 37	[illegible]	8 33
24	5 54 0	21 10	2 27	4 47	29 15	8 24	18 41	9 16
25	6 54 14	5♐18	3 29	4 54	29 8	9 11	19 56	10 4
26	7 54 27	19 19	4 18	5 1	29 1	9 59	21 11	10 55
B	8 54 39	3♑11	4 52	5 8	28 55	10 4	22 25	11 49
28	9 54 49	16 54	5 8	5 15	28 47	11 33	23 40	12 45

Days	♃ riſes	♂ ſets	♀ ſets	☿ ſets	♄'s declin.	♃'s declin.	♂'s declin.	♀'s declin.	☿'s declin.
1	8 a 57	5 a 11	5 a 9	5 a 0	1 s 9	0 n 53	15 s 47	16 s 11	12 s 34
7	8 31	5 15	5 27	riſes	0 54	1 3	14 13	13 44	14 14
13	8 5	5 19	5 47	6 m 5	0 39	1 15	12 34	11 4	16 5
19	7 38	5 23	6 8	5 55	0 2[illegible]	1 30	10 51	8 13	17 13
25	7 11	5 27	6 28	5 45	0 6	1 46	9 4	5 35	[illegible]

March hath XXXI Days.

The Lunations.

New Moon the 4th day, at 28 minutes paſt 8 night.
Firſt quarter the 12th day, at 59 minutes paſt 11 night.
Full Moon the 20th day, at 13 minutes paſt 7 morning.
Laſt quarter the 26th day, at 52 minutes paſt 10 night.

M D	Sundays & other remark. days	☉ riſes	☉ ſets	☉'s declin.	☾'s declin.	☽ riſes & ſets	☾ South	Clock bef. ☉
1	David	6 34	5 26	7 s 29	15 s 5	4 m 24	9 m 10	12′ 38″
2	Chad.	6 32	5 28	7 6	12 6	5 0	10 2	12 25
3		6 30	5 30	6 43	8 33	5 30	10 51	12 12
4		6 29	5 31	6 20	4 40	☽ ſets	11 39	11 59
5		6 27	5 33	5 57	0 3	6 a 34	0 a 24	11 45
B	Quinq. Shro. S.	6 25	5 35	5 34	3 n 21	7 40	1 9	11 31
7	Perpetua	6 23	5 37	5 10	7 7	8 43	1 54	11 17
8	Shrove Tueſday	6 21	5 39	4 47	10 33	9 46	2 38	11 2
9	Aſh Wedneſday	6 19	5 41	4 23	13 30	10 48	3 23	10 46
10		6 17	5 43	4 0	15 53	11 46	4 9	10 31
11		6 15	5 45	3 36	17 35	morn	4 56	10 14
12	Gregory	6 13	5 47	3 13	18 33	0 44	5 44	9 58
B	1 Sun. in Lent	6 11	5 49	2 49	18 40	1 36	6 33	9 41
14		6 9	5 51	2 26	17 55	2 23	7 23	9 24
15		6 7	5 53	2 2	16 16	3 3	8 13	9 7
16	Ember Week.	6 5	5 55	1 38	13 45	3 40	9 4	8 50
17	St. Patrick	6 3	5 57	1 15	10 26	4 13	9 56	8 32
18	Edw. K. W. S.	6 1	5 59	0 51	6 28	4 45	10 48	8 14
19		5 59	6 1	0 27	2 2	5 15	11 41	7 56
B	2 Sund. in Lent	5 57	6 3	0 4	2 s 37	☽ riſes	morn	7 37
21	Benedict	5 55	6 5	0 n 20	7 11	8 a 4	0 35	7 19
22		5 53	6 7	0 44	11 20	9 21	1 30	7 0
23		5 51	6 9	1 7	14 45	10 37	2 27	6 42
24		5 49	6 11	1 31	17 11	11 43	3 26	6 23
25	Ann. or Lady Day	5 47	6 13	1 55	18 28	morn	4 25	6 4
26		5 45	6 15	2 18	18 34	0 55	5 23	5 46
B	3 Sund. in Lent	5 43	6 17	2 42	17 34	1 48	6 20	5 27
28		5 41	6 19	3 5	15 35	2 32	7 14	5 8
29		5 39	6 21	3 28	12 47	3 9	8 6	4 50
30		5 37	6 23	3 52	9 26	3 41	8 56	4 31
31		5 35	6 25	4 15	5 52	4 10	9 43	4 13

Days	Day increaſ.	Length of day	Helioc. long. ♄	Helioc. long. ♃	Helioc. long. ♂	Helioc. long. ⊖	Helioc. long. ♀	Helioc. long. ☿	♄ ſets.
1	3 7	10 51	7 ♈ 51	25 ♍ 29	13 ♓ 21	10 ♍ 55	14 ♈ 15	22 ♏ 22	7 a 36
7	3 31	11 15	8 4	25 56	17 8	16 55	23 50	9 ♐ 3	7 17
13	3 55	11 39	8 16	26 23	20 55	22 54	3 ♉ 25	25 34	6 59
19	4 19	12 3	8 28	26 51	24 41	28 52	13 1	12 ♑ 40	6 42
25	4 43	12 27	8 41	27 18	28 26	4 ♎ 48	22 38	1 ♒ 8	6 25

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. ☽'s node	♄'s latitude	♃'s latitude	♂'s latitude	♀'s latitude	☿'s latitude
1	4 43	7 17	1 55	24♎ 9	2 s 13	1 n 33	0 s 58	1 s 18	0 s 23
7	4 30	7 30	1 56	23 50	2 13	1 34	0 56	1 10	1 15
13	4 17	7 43	1 57	23 31	2 13	1 34	0 54	1 0	1 52
19	4 5	7 56	1 58	23 12	2 12	1 35	0 52	0 48	2 14
25	3 50	8 10	2 0	22 53	2 12	1 35	0 4[illegible]	0 55	2 20

Days	☉'s longitude	☽'s long.	☽'s latitude	♄'s long.	♃'s long.	♂'s long.	♀'s long.	☿'s long.
1	♓10 54 57	0♒26	5 n 6	5♈22	28♍40	12♓20	24♓55	13♒45
2	11 55 4	13 46	4 49	5 29	28 33	13 8	26 10	14 47
3	12 55 9	26 54	4 16	5 36	28 26	13 55	27 24	15 42
4	13 55 12	9♓47	3 39	5 43	28 18	14 42	28 39	16 59
5	14 55 13	22 26	2 35	5 50	28 11	15 29	29 53	18 8
B	15 55 13	4♈50	1 33	5 58	28 4	16 16	1♈ 8	19 19
7	16 55 10	17 1	0 28	6 5	27 56	17 3	2 22	20 32
8	17 55 5	29 1	0 s 38	6 12	27 49	17 50	3 37	21 47
9	18 54 58	10♉54	1 41	6 19	27 41	18 37	4 51	23 4
10	19 54 50	22 42	2 40	6 27	27 34	19 24	6 6	24 42
11	20 54 38	4♊30	3 32	6 34	27 26	20 11	7 20	25 42
12	21 54 24	16 24	4 15	6 41	27 18	20 58	8 35	27 3
B	22 54 7	28 29	4 48	6 49	27 10	21 45	9 49	28 26
14	23 53 49	10♋48	5 8	6 56	27 3	22 32	11 3	29 51
15	24 53 28	23 28	5 14	7 4	26 55	23 [illegible]	12 18	1♓17
16	25 53 5	6♌30	5 4	7 11	26 47	24 6	13 32	2 45
17	26 52 39	19 57	4 38	7 19	26 39	24 52	14 46	4 14
18	27 52 11	3♍49	3 55	7 26	26 31	25 39	16 0	5 44
19	28 51 42	18 3	2 56	7 34	26 23	26 26	17 14	7 15
B	29 51 10	2♎34	1 45	7 41	26 15	27 13	18 29	8 [illegible]
21	♈ 0 50 36	17 18	0 25	7 49	26 7	27 59	19 43	10 21
22	1 50 0	2♏ 5	0 n 56	7 56	26 0	28 45	20 57	11 59
23	2 49 22	16 50	2 14	8 3	25 52	29 [illegible]	[illegible]	13 36
24	3 48 43	1♐26	3 22	8 11	25 44	0♈18	23 25	15 14
25	4 48 2	15 49	4 16	8 18	25 37	1 4	24 39	16 54
26	5 47 19	29 57	4 54	8 26	25 29	1 51	25 53	18 35
B	6 46 34	13♑46	5 13	8 33	25 22	2 37	27 7	20 17
28	7 45 48	27 18	5 15	8 41	25 15	3 24	28 20	22 0
29	8 45 0	10♒34	5 0	8 48	25 7	4 10	29 34	23 45
30	9 44 10	23 33	4 30	8 56	25 0	4 57	0♉47	25 32
31	10 43 18	6♓10	3 47	9 3	24 53	5 43	2 1	27 21

Days	♃ riſes	♂ ſets	♀ ſets	☿ riſes	♄'s declin.	♃'s declin.	♂'s declin.	♀'s declin.	☿'s declin.
1	6 a 53	5 a 29	6 a 41	5 m 43	0 n 6	1 n 57	7 s 51	3 s 13	17 s
7	6 26	5 3	7 1	5 43	0 23	2 16	5 50	0 8	15 5
13	5 58	riſes	7 22	5 42	0 41	2 34	4 7	2 n 58	13 4
19	ſets	6 m 1	7 42	5 40	0 59	2 53	2 13	6 [illegible]	10
25	5 m 45	5 47	8 3	5 37	1 16	3 11	0 20	9 [illegible]	[illegible]

April hath xxx Days White.

The Lunations.

New Moon the 3d day, at 41 minutes paſt 12 noon.
Firſt quarter the 11th day, at 17 minutes paſt 5 afternoon.
Full Moon the 18th day, at 48 minutes paſt 4 afternoon.
Laſt quarter the 25th day, at 47 minutes paſt 7 morning.

M D	Sundays & other remark. days	☉ riſes		☉ ſets		☉'s declin.		☽'s declin.		☽ riſes & ſets		☽ South		Clock bef. ☉	
1		5	33	6	27	4 n	38	1 s	46	4 m	35	10 m	29	3′	55″
2		5	31	6	29	5	1	2 n	11	4	58	11	13	3	36
B	4 or Midl. Sun.	Richard		6	31	5	24	6	0	☾ ſets		11	58	3	18
4	St. Ambroſe	5	27	6	33	5	47	9	31	7 a	43	0 a	42	3	1
5	Old Lady Day	5	25	6	35	6	10	12	37	8	45	1	27	2	43
6		5	23	6	37	6	32	15	11	9	43	2	12	2	25
7		5	21	6	39	6	55	17	6	10	40	2	59	2	8
8		5	19	6	41	7	17	18	16	11	37	3	46	1	51
9		5	17	6	43	7	40	18	38	morn		4	34	1	34
B	5 Sund. in Lent	5	16	6	44	8	2	18	11	0	23	5	23	1	17
11		5	14	6	46	8	24	16	53	1	6	6	12	1	1
12		5	12	6	48	8	46	14	44	1	45	7	1	0	45
13		5	10	6	50	9	8	11	48	2	19	7	51	0	29
14		5	8	6	52	9	29	8	11	2	51	8	42	0	13
15	Cam. T. ends	5	6	6	54	9	51	4	0	3	20	9	33	0 af.	2
16	Oxf. T. ends	5	4	6	56	10	12	0 s	32	3	48	10	26	0	17
B	6 or Palm Sun.	5	2	6	58	10	33	5	9	4	17	11	21	0	32
18		5	0	7	0	10	54	9	35	☾ riſes		morn		0	46
19	Alphege	4	58	7	2	11	15	13	24	8 a	22	0	18	1	0
20		4	57	7	3	11	36	16	21	9	40	1	18	1	13
21	Maundy Th.	4	55	7	5	11	56	18	8	10	49	2	19	1	26
22	Good Friday	4	53	7	7	12	16	18	39	11	50	3	20	1	38
23	St. George	4	51	7	9	12	36	17	57	morn		4	19	1	50
B	Eaſter Day	4	49	7	11	12	56	16	10	0	37	5	16	2	2
25	Ea. M. St. Mark	4	47	7	13	13	10	13	32	1	18	6	10	2	13
26	E. T. {Pr. M. b.	4	46	7	15	13	35	10	16	1	51	7	0	2	23
27		4	44	7	16	13	54	6	36	2	21	7	48	2	33
28		4	42	7	18	14	13	2	43	2	48	8	34	2	43
29		4	40	7	20	14	32	1 n	13	3	11	9	18	2	52
30		4	38	7	22	14	50	5	3	3	34	10	2	3	0

Days	Day increaſ.		Length of day		Helioc. long. ♄		Helioc. long. ♃		Helioc. long. ♂		Helioc long. ⊖		Helioc. long. ♀		Helioc. long. ☿		♄ riſes	
1	5	11	12	55	8 ♈	55	27 ♍	50	2 ♈	47	11 ♎	42	3 ♊	52	25 ♒	45	5 m	44
7	5	35	13	19	9	7	28	17	6	29	17	36	13	33	20 ♓	53	5	23
13	5	57	13	41	9	20	28	44	10	10	23	29	23	13	21 ♈	1	5	2
19	6	21	14	5	9	32	29	11	13	50	29	20	2 ♋	55	26 ♉	14	4	41
25	6	43	14	27	9	44	29	39	17	28	5 ♏	11	12	38	3 ♋	56	4	20

Day lig. begins	Day lig. ends	Durat. twilig.	Pl. ☽'s node	♄'s latitude	♃'s latitude	♂'s latitude	♀'s latitude	☿'s latitude
3 33	8 27	2 3	22 ♎ 31	2 s 13	1 n 34	0 s 46	0 s 18	2 s 5
3 17	8 43	2 8	22 12	2 13	1 34	0 43	0 2	1 33
3 2	8 58	2 11	21 53	2 13	1 33	0 40	0 n 14	0 44
2 47	9 13	2 15	21 33	2 13	1 32	0 37	0 31	0 n 18
2 26	9 34	2 25	21 14	2 14	1 31	0 33	0 47	1 21

	☉'s longitude	☽'s long.	☽'s latitude	♄'s long.	♃'s long.	♂'s long.	♀'s long.	☿'s long.
1	♈ 11 42 25	18 ♓ 51	2 n 53	9 ♈ 11	24 ♍ 46	6 ♈ 30	3 ♉ 14	29 ♓ 11
2	12 41 30	1 ♈ 11	1 52	9 18	24 39	7 16	4 28	1 ♈ 2
B	13 40 33	13 21	0 47	9 26	24 32	8 3	5 41	2 54
4	14 39 33	25 23	0 s 20	9 33	24 25	8 49	6 55	4 48
5	15 38 32	7 ♉ 17	1 25	9 41	24 18	9 35	8 9	6 43
6	16 37 29	19 7	2 26	9 48	24 11	10 21	9 22	8 40
7	17 36 23	0 ♊ 55	3 21	9 56	24 4	11 7	10 36	10 38
8	18 35 15	12 44	4 7	10 3	23 57	11 53	11 50	12 37
9	19 34 5	24 39	4 43	10 11	23 51	12 39	13 3	14 37
B	20 32 52	6 ♋ 42	5 7	10 18	23 44	13 25	14 17	16 39
11	21 31 37	19 0	5 18	10 26	23 38	14 11	15 30	18 42
12	22 30 20	1 ♌ 35	5 13	10 33	23 32	14 57	16 44	20 46
13	23 29 0	14 32	4 53	10 41	23 26	15 43	17 57	22 52
14	24 27 38	27 54	4 17	10 48	23 21	16 29	19 10	24 58
15	25 26 14	11 ♍ 43	3 25	10 55	23 15	17 14	20 23	27 5
16	26 24 48	25 58	2 19	11 3	23 10	18 0	21 36	29 12
B	27 23 20	10 ♎ 37	1 2	11 10	23 4	18 45	22 49	1 ♉ 20
18	28 21 49	25 33	0 n 20	11 18	22 59	19 31	24 2	3 27
19	29 20 17	10 ♏ 39	1 42	11 25	22 54	20 16	25 15	5 34
20	♉ 0 18 44	25 46	2 57	11 32	22 50	21 2	26 28	7 41
21	1 17 8	10 ♐ 45	3 59	11 40	22 45	21 47	27 41	9 47
22	2 15 31	25 28	4 44	11 47	22 40	22 33	28 54	11 52
23	3 13 52	9 ♑ 50	5 10	11 54	22 36	23 18	0 ♊ 7	13 55
B	4 12 12	23 48	5 17	12 1	22 31	24 4	1 20	15 56
25	5 10 30	7 ♒ 21	5 6	12 8	22 26	24 49	2 32	17 56
26	6 8 47	20 31	4 38	12 15	22 22	25 34	3 45	19 53
27	7 7 2	3 ♓ 20	3 58	12 22	22 19	26 19	4 57	21 47
28	8 5 16	15 52	3 7	12 29	22 15	27 4	6 10	23 39
29	9 3 29	28 9	2 8	12 36	22 12	27 49	7 22	25 28
30	10 1 40	10 ♈ 16	1 4	12 43	22 8	28 34	8 35	27 13

Days	♃ ſets	♂ riſes	♀ ſets	☿ riſes	♄'s declin.	♃'s declin.	♂'s declin.	♀'s declin.	☿'s declin.
1	5 m 23	5 m 29	8 a 29	5 m 24	1 n 37	3 n 32	1 n 53	12 n 20	2 s 14
7	4 59	5 15	8 50	5 21	1 54	3 48	3 44	14 59	2 n 47
13	4 35	5 1	9 12	ſets	2 12	4 2	5 35	17 26	8 13
19	4 12	4 47	9 32	7 a 39	2 29	4 14	7 22	19 36	13 41
25	3 49	4 32	9 53	8 34	2 45	4 24	9 6	21 28	18 30

May hath xxxi Days.

The Lunations.

New Moon the 3d day, at 20 minutes paſt 5 morning.
Firſt quarter the 11th day, at 46 minutes paſt 6 morning.
Full Moon the 18th day, at 44 minutes paſt 0 morning.
Laſt quarter the 24th day, at 30 minutes paſt 6 afternoon.

M D	Sundays & other remark. days	☉ riſes		☉ ſets		☉'s declin.		☽'s declin.		☽ riſes & ſets		☽ South		Clo aft.
B	St. Phil. and Ja.	4	37	7	23	15 n	9	8 n	38	3 m	56	10 m	46	3
2	[Low Sun.	4	35	7	25	15	26	11	51	4	21	11	29	3
3	Inven. of Croſs	4	33	7	27	15	44	14	34	☾ ſets		0 a	15	3
4	Ox. & Ca. T. beg.	4	31	7	29	16	2	16	40	8 a	43	1	1	3
5		4	30	7	30	16	19	18	4	9	37	1	48	3
6	St. John A. P. L.	4	28	7	32	16	36	18	40	10	26	2	36	3
7		4	26	7	34	16	52	18	27	11	10	3	24	3
B	2 S. aft. Eaſter	4	25	7	35	17	9	17	23	11	49	4	12	3
9		4	23	7	37	17	25	15	31	morn		5	0	3
10		4	21	7	39	17	41	12	53	0	22	5	48	3
11	Eaſter T. beg.	4	20	7	40	17	56	9	34	0	55	6	37	3
12	Old May Day	4	18	7	42	18	11	5	41	1	25	7	26	3
13		4	17	7	43	18	26	1	23	1	51	8	16	3
14		4	15	7	45	18	41	3 s	8	2	18	9	8	4
B	3 S. af. Eaſter	4	14	7	46	18	55	7	37	2	48	10	3	4
16		4	12	7	48	19	9	11	44	3	20	11	1	3
17		4	11	7	49	19	23	15	9	3	59	morn		3
18		4	9	7	51	19	36	17	32	☾ riſes		0	1	3
19	Q. Charlott. b. Dunſt.			7	52	19	49	18	39	9 a	36	1	3	3
20		4	7	7	53	20	2	18	27	10	31	2	5	3
21		4	5	7	55	20	14	17	0	11	15	3	5	3
B	4 S. a. E. Prs. E. b	4	4	7	56	20	26	14	33	11	52	4	2	3
23		4	3	7	57	20	37	11	23	morn		4	55	3
24		4	1	7	59	20	49	7	43	0	25	5	45	3
25		4	0	8	0	21	0	3	48	0	52	6	32	3
26	Auguſtin	3	59	8	1	21	10	0 n	10	1	17	7	18	3
27	Vene. Bede	3	58	8	2	21	20	4	3	1	40	8	2	3
28		3	57	8	3	21	30	7	43	2	4	8	45	3
B	Roga. S. K. Ch.	3	56	8	4	21	39	11	3	2	30	9	29	3
30	[2. reſtor.	3	55	8	5	21	49	13	55	2	57	10	15	2
31		3	54	8	6	21	57	16	13	3	28	10	58	2

Days	Day increaſ.		Length of day		Helioc. long. ♄		Helioc. long. ♃		Helioc. long. ♂		Helioc. long. ⊖		Helioc. long. ♀		Helioc. long. ☿		♄ riſe
1	6	13	14	27	9 ♈	57	0 ♎	6	21 ♈	4	11 ♏	0	22 ♋	22	9 ♌	21	3 m
7	7	25	15	9	10	9	0	34	24	38	16	48	2 ♌	7	6 ♍	2	3
13	7	43	15	27	10	21	1	1	28	11	22	36	11	52	4 ♎	19	3
19	8	1	15	45	10	34	1	28	1 ♉	41	28	22	21	37	25	15	2
25	8	16	16	0	10	46	1	55	5	10	4 ♐	7	1 ♍	23	13 ♏	46	2

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. ☽'s node	♄'s latitude	♃'s latitude	♂'s latitude	♀'s latitude	☿'s latitude
1	2 6	9 57	2 37	20♎55	2 s 15	1 n 31	0 s 30	1 n 3	2 n 9
7	1 44	10 19	2 48	20 36	2 15	1 3[illegible]	0 26	1 18	2 30
3	1 19	10 45	3 5	20 17	2 10	1 28	0 23	1 31	2 18
9	0 48	11 20	3 32	19 58	2 1[illegible]	1 27	0 19	1 43	1 31
5	0	All day light.		19 3[illegible]	2 1[illegible]	1 26	0 15	1 52	0 11

M D	☉'s longitude	☽'s long.	☽'s latitude	♄'s long.	♃'s long.	♂'s long.	♀'s long.	☿'s long.
B	♉ 10 59 49	22♈14	0 s 2	12♈50	22♍ 5	29♈19	9♊47	28♉55
2	11 57 57	4♉ 7	1 7	12 57	22 2	0♉ 4	11 0	0♊33
3	12 56 4	15 57	2 9	13 4	22 0	0 49	12 12	2 7
4	13 54 9	27 45	3 5	13 11	21 57	1 34	13 24	3 38
5	14 52 12	9♊35	3 53	13 18	21 55	2 19	14 37	5 5
6	15 50 13	21 27	4 32	13 24	21 52	3 3	15 49	6 28
7	16 48 12	3♋25	4 58	13 31	21 50	3 48	17 1	7 47
	17 46 10	15 32	5 12	13 38	21 48	4 32	18 13	9 2
9	18 44 6	27 50	5 12	13 45	21 47	5 16	19 25	10 13
0	19 42 0	10♌24	4 57	13 51	21 45	6 1	20 37	11 20
1	20 39 52	23 17	4 27	13 58	21 44	6 45	21 49	12 23
2	21 37 42	6♍31	3 42	14 5	21 42	7 29	23 1	13 21
3	22 35 30	20 11	2 43	14 11	21 41	8 14	24 13	14 14
4	23 33 17	4♎17	1 33	14 18	21 40	8 58	25 25	15 3
B	24 31 2	18 49	0 15	14 24	21 39	9 42	26 36	15 48
6	25 28 45	3♏42	1 n 6	14 30	21 39	10 27	27 48	16 28
7	26 26 27	18 52	2 24	14 37	21 38	11 11	28 59	17 4
8	27 24 8	4♐ 7	3 32	14 43	21 D 38	11 55	0♋11	17 33
9	28 21 48	19 19	4 24	14 49	21 38	12 39	1 22	18 1
0	29 19 26	4♑17	4 57	14 55	21 39	13 23	2 33	18 22
1	♊ 0 17 3	18 53	5 11	15 1	21 39	14 7	3 45	18 38
	1 14 39	3♒ 3	5 4	15 7	21 40	14 51	4 56	18 50
3	2 12 14	16 43	4 41	15 13	21 41	15 34	6 7	18 57
4	3 9 49	29 56	4 3	15 19	21 42	16 18	7 18	19 ℞ 0
5	4 7 23	12♓45	3 13	15 25	21 43	17 2	8 29	18 58
6	5 4 56	25 10	2 16	15 31	21 44	17 46	9 40	18 52
7	6 2 28	7♈21	1 14	15 36	21 46	18 29	10 51	18 41
8	7 0 0	19 20	0 10	15 42	21 47	19 13	12 2	18 26
B	7 57 31	1♉12	0 s 54	15 48	21 4[illegible]	19 56	13 13	18 7
0	8 51 1	13 0	1 56	15 53	21 51	20 40	14 24	17 43
1	9 52 30	24 48	2 52	15 5[illegible]	21 5[illegible]	21 23	15 35	17 19

M D	♃ ſets	♂ riſes	♀ ſets	☿ ſets	♄'s declin.	♃'s declin	♂'s declin.	♀'s declin	☿'s declin
1	3 m 26	4 m 17	10 a 11	9 a 17	3 n 1	4 n 32	10 n 46	22 n 5[illegible]	2[illegible] n [illegible]
7	3 3	4 2	10 26	9 37	3 16	4 37	12 22	24 7	24 [illegible]
3	2 39	3 47	10 4[illegible]	9 57	3 30	4 40	13 54	24 51	24 [illegible]
9	2 15	3 32	10 50	9 36	3 44	4 3[illegible]	15 21	25 1[illegible]	24 [illegible]
5	1 51	3 18	10 58	9 18	3 57	4 3[illegible]	16 42	25 [illegible]	[illegible]

June hath xxx Days.

The Lunations.

New Moon the 1ſt day, at 14 minutes paſt 9 night.
Firſt quarter the 9th day, at 42 minutes paſt 4 afternoon.
Full Moon the 16th day, at 43 minutes paſt 7 morning.
Laſt quarter the 23d day, at 30 minutes paſt 7 morning.

M D	Sundays & other remark. days.	☉ riſes	☉ ſets	☉'s declin.	☽'s declin.	☽ riſes & ſets	☽ South	Clock aft. ☉
1	Nicomede	3 53	8 7	22 n 6	17 n 49	☽ ſets	11m 44	2 38
2	Aſcenſion Day	3 52	8 8	22 13	18 39	8 a 22	0 a 32	2 29
3		3 51	8 9	22 21	18 40	9 10	1 20	2 19
4	K. Geo. 3 born	3 50	8 10	22 28	17 50	9 50	2 8	2 9
B	S aft. Aſc.	Pr. Er.A	Bonifa.	22 35	16 10	10 26	2 56	1 59
6	Cant. T. ends	3 49	8 11	22 41	13 44	10 58	3 44	1 48
7		3 48	8 12	22 47	10 38	11 28	4 31	1 37
8		3 47	8 13	22 53	6 58	11 54	5 18	1 26
9	Oxford T. ends	3 47	8 13	22 58	2 53	morn	6 6	1 15
10		3 46	8 14	23 3	1 s 28	0 18	6 56	1 3
11	St. Barnabas	3 45	8 15	23 7	5 52	0 45	7 48	0 51
B	Whit Sunday	3 45	8 15	23 11	10 3	1 16	8 42	0 39
13	Whit Monday	3 44	8 16	23 14	13 44	1 49	9 39	0 27
14	Whit Tueſday	3 44	8 16	23 18	16 35	2 29	10 39	0 15
15	Ember week	3 44	8 16	23 20	18 19	3 15	11 40	0 2
16		3 44	8 16	23 23	18 45	☽ riſes	morn	o bef. 10
17	St. Alban	3 43	8 17	23 24	17 52	9 a 4	0 42	0 23
18		3 43	8 17	23 26	15 48	9 46	1 42	0 36
B	Trinity Sunday	3 43	8 17	23 27	12 49	10 21	2 39	0 49
20	Tra. Ed. KWS	3 43	8 17	23 28	9 13	10 51	3 32	1 2
21	Longeſt day	3 43	8 17	23 28	5 17	11 18	4 22	1 14
22	Oxf. Term beg	3 43	8 17	23 28	1 13	11 42	5 9	1 27
23	Corpus Chriſt.	3 43	8 17	23 27	2 n 48	morn	5 54	1 40
24	Nat. J. Bapt.	Midſ.	8 17	23 26	6 36	0 4	6 38	1 53
25	ſTer. b.	3 43	8 17	23 25	10 4	0 28	7 21	2 6
B	1 S. aft. Trin.	3 44	8 16	23 23	13 6	0 55	8 5	2 18
27		3 44	8 16	23 21	15 34	1 25	8 50	2 31
28		3 44	8 16	23 18	17 25	1 57	9 36	2 44
29	St. Peter	3 44	8 16	23 15	18 30	2 36	10 23	2 56
30		3 45	8 15	23 11	18 46	3 20	11 11	3 8

M D	Day increaſ.	Length of day	Helioc. long. ♄	Helioc. long. ♃	Helioc. long. ♂	Helioc. long. ⊖	Helioc. long. ♀	Helioc. long. ☿	♄ riſes
1	8 30	16 14	11 ♈ 0	2 ♎ 27	9 ♉ 11	10 ♐ 50	12 ♍ 46	3 ♐ 37	2m 3
7	8 40	16 24	11 13	2 54	12 35	16 34	22 30	20 6	1 40
13	8 44	16 30	11 25	3 22	15 58	22 18	2 ♎ 13	6 ♑ 56	1 16
19	8 50	16 34	11 38	3 49	19 18	28 2	11 55	24 51	0 52
25	8 5[illegible]	16 34	11 50	4 16	22 36	3 ♑ 45	21 26	14 ♒ 48	0 28

Day lig. begins	Day lig. ends	Durat. twilig.	Pl. ☽'s node	♄'s latitude	♃'s latitude	♂'s latitude	♀'s latitude	☿'s latitude
			19♎17	2 s 20	1 n 23	0 s 10	1 n 59	1 s 47
			18 58	2 21	1 22	0 7	2 3	3 20
No	real	night	18 39	2 22	1 21	0 3	2 3	4 14
			18 20	2 24	1 20	0 n 1	1 59	4 21
			18 1	2 25	1 18	0 6	1 52	3 48

☉'s longitude	☽'s long.	☽'s latitude	♄'s long.	♃'s long.	♂'s long.	♀'s long.	☿'s long.
♊10 49 58	6♊35	3 s 40	16♈ 4	21♍55	22♉ 6	16♋45	16♊51
11 47 26	18 32	4 19	16 9	21 57	22 49	17 55	16 20
12 44 53	0♋31	4 48	16 15	22 0	23 33	19 6	15 48
13 42 13	12 38	5 3	16 20	22 3	24 16	20 16	15 16
14 39 42	24 53	5 5	16 25	22 6	24 59	21 26	14 43
15 37 5	7♌19	4 52	16 30	22 9	25 42	22 36	14 9
16 34 28	19 57	4 26	16 35	22 13	26 25	23 46	13 36
17 31 49	2♍51	3 45	16 40	22 17	27 8	24 56	13 4
18 29 9	16 2	2 51	16 45	22 21	27 51	26 6	12 34
19 26 28	29 35	1 47	16 49	22 25	28 33	27 16	12 6
20 23 40	13♎30	0 35	16 54	22 29	29 16	28 26	11 41
21 21 3	27 48	0 n 42	16 59	22 33	29 59	29 36	11 19
22 18 19	12♏28	1 57	17 3	22 37	0♊41	0♌45	11 0
23 15 35	27 26	3 6	17 8	22 41	1 24	1 55	10 45
24 12 50	12♐33	4 2	17 12	22 4[illegible]	2 6	3 4	10 34
25 10 4	27 42	4 42	17 17	22 51	2 49	4 13	10 28
26 7 18	12♑41	5 1	17 21	22 56	3 31	5 22	10D 26
27 4 31	27 22	5 0	17 25	23 1	4 14	6 31	10 28
28 1 44	11♒37	4 41	17 29	23 6	4 56	7 40	10 35
28 58 57	25 23	4 5	17 33	23 11	5 38	8 49	10 47
29 56 10	8♓41	3 17	17 36	23 17	6 20	9 57	11 4
♋ 0 53 23	21 31	2 21	17 40	23 23	7 2	11 6	11 25
1 50 36	3♈59	1 19	17 44	23 29	7 44	12 14	11 5[illegible]
2 47 49	16 9	0 15	17 48	23 35	8 26	13 23	12 22
3 45 2	28 7	0 s 48	17 51	23 41	9 8	14 31	12 57
4 42 15	9♉57	1 49	17 54	23 48	9 50	15 39	13 37
5 39 28	21 45	2 44	17 58	23 54	10 32	16 47	14 21
6 36 42	3♊34	3 33	18 1	23 1	11 14	17 55	15 10
7 33 56	15 23	4 12	18 5	23 7	11 55	19 2	16 3
8 31 10	27 28	4 41	18 8	23 14	12 37	20 10	17 [illegible]

♃ ſets	♂ riſes	♀ ſets	☿ ſets	♄'s declin.	♃'s declin.	♂'s declin.	♀'s declin.	☿'s declin.
1 m 23	3 m 1	11 a 0	8 25	4 n 1[illegible]	4 n 29	18 n 9	24 n 23	21 n 2
0 58	2 47	11 0	riſes	4 21	4 21	19 16	23 23	19 9
0 33	2 33	10 51	3 m 35	4 30	4 10	20 17	22 0	17 55
0 8	2 20	10 46	3 13	4 39	3 58	21 11	20 17	17 45
11 a 43	2 7	10 36	2 50	4 47	3 42	21 57	18 17	18 37

The LUNATIONS.

New Moon the 1ſt day, at 41 minutes paſt 11 morning.
Firſt quarter the 8th day, at 54 minutes paſt 11 night.
Full Moon the 15th day, at 53 minutes paſt 2 afternoon.
Laſt quarter the 22d day, at 58 minutes paſt 10 night.
New Moon the 31ſt day, at 39 minutes paſt 0 morning.

M D	Sundays & other remark. days	☉ riſes		☉ ſets		☉'s declin.		☽'s declin.		☽ riſes & ſets		☽ South		Clock bef. ☉	
1		3	45	8	15	23 n	8	18 n	11	☽ ſets		11 m	59	3	2
2	Viſit. of B. V. M. 2 S. aft. Trin.	3	46	8	14	23	3	16	45	8 a	22	0 a	48	3	3
		D. d. b		8	14	22	59	14	30	8	56	1	36	3	4
4	Trans. St. Mar.	3	47	8	13	22	53	11	34	9	26	2	23	3	5
5	Camb. Com.	OldMi		8	12	22	48	8	2	9	54	3	11	4	
6		3	48	8	12	22	42	4	3	10	22	3	59	4	1
7	Thos. a Becket	3	49	8	11	22	36	0 s	11	10	47	4	47	4	2
8	Camb. Ter. ends	3	50	8	10	22	29	4	30	11	13	5	36	4	3
9	3 S. aft. Trin.	3	51	8	9	22	22	8	40	11	44	6	28	4	4
		3	51	8	9	22	15	12	26	morn		7	22	4	5
11	Oxford Act	3	52	8	8	22	7	15	32	0	18	8	19	5	
12		3	53	8	7	21	59	17	41	1	1	9	18	5	
13	Trin. T. ends	3	54	8	6	21	50	18	40	1	49	10	18	5	1
14		3	55	8	5	21	41	18	23	2	49	11	19	5	2
15	Swithin	3	56	8	4	21	32	16	51	☽ riſes		morn		5	2
16	Oxf. T. ends 4 S. aft. Trin.	3	58	8	2	21	22	14	16	8 a	13	0	18	5	3
	[illegible]	3	59	8	1	21	12	10	54	8	45	1	14	5	3
18	[illegible]	4	0	8	0	21	2	7	1	9	15	2	6	5	4
19		4	1	7	59	20	51	2	54	9	42	2	56	5	4
20	Margaret	4	2	7	58	20	40	1 n	13	10	6	3	43	5	5
21		4	4	7	56	20	28	5	10	10	30	4	28	5	5
22	Magdalen	4	5	7	55	20	17	8	48	10	56	5	13	5	5
23	5 S. aft. Trin.	4	6	7	54	20	4	12	1	11	25	5	57	6	
	St. James	4	7	7	53	19	52	14	42	11	55	6	42	6	
25		4	9	7	51	19	39	16	45	morn		7	28	6	
26	S. Anne M. V. M.	4	10	7	50	19	26	18	6	0	31	8	14	6	
27		4	12	7	48	19	12	18	39	1	11	9	1	6	
28	[illegible]	4	13	7	47	18	59	18	22	2	1	9	51	6	
29		4	15	7	45	18	45	17	13	2	57	10	40	6	
30	6 S. aft. Trin.	4	16	7	44	18	30	15	14	3	56	11	29	5	5
		4	18	7	42	18	15	12	29	☽ ſets		0 a	18	5	5

D	Day [illegible]		Length of day		Helioc. long. ♄		Helioc. long. ♃		Helioc. long. ♂		Helioc. long. ⊖		Helioc. long. ♀		Helioc. long. ☿		♄ riſes	
1	0	5	16	29	12 ♈	2	4 ♎	43	25 ♉	52	9 ♑	28	1 ♏	15	7 ♓	54	0	
[illegible]	0	12	16	22	12	15	5	10	29	6	15	1[illegible]	10	52	5 ♈	27	11 a	3
13	0	2[illegible]	16	12	12	27	5	38	2 ♊	18	20	55	20	28	8 ♉	17	11	1
19	0	36	15	58	2	0	6	5	5	28	26	3[illegible]	0 ♐	2	15 ♊	18	10	4
[illegible]		52	15	42	12	52	6	32	8	36	2 ♒	22	9	4	22 ♋	26	10	2

	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. ☽'s node	♄'s latitude	♃'s latitude	♂'s latitude	♀'s latitude	☿'s latitude
1				17♎41	2 s 27	1 n 16	0 n 10	1 n 41	2 s 48
7	All	day-	light	17 22	2 28	1 15	0 14	1 26	1 33
3				17 3	2 30	1 14	0 18	1 7	0 15
9				16 44	2 32	1 14	0 22	0 44	0 n 51
5	0 45	11 7	3 20	16 25	2 33	1 12	0 26	0 16	1 32

	☉'s longitude	☽'s long.	☽'s latitude	♄'s long.	♃'s long.	♂'s long.	♀'s long.	☿'s long.
1	♋ 9 28 23	9♋37	4 s 57	18♈11	24♍21	13♊19	21♌18	18♊3
2	10 25 37	21 56	5 0	18 14	24 28	14 1	22 25	19 7
	11 22 51	4♌25	4 48	18 17	24 35	14 42	23 32	20 17
4	12 20 4	17 5	4 22	18 19	24 43	15 24	24 39	21 34
5	13 17 17	29 56	3 43	18 22	24 50	16 5	25 46	22 54
6	14 14 30	12♍59	2 51	18 25	24 57	16 46	26 53	24 17
7	15 11 43	26 16	1 49	18 27	25 5	17 27	28 0	25 42
8	16 8 56	9♎49	0 40	18 29	25 13	18 9	29 6	27 12
9	17 6 9	23 38	0 n 33	18 31	25 21	18 50	0♍12	28 46
	18 3 22	7♏45	1 46	18 33	25 29	19 31	1 18	0♋24
1	19 0 35	22 9	2 53	18 35	25 37	20 12	2 24	2 15
2	19 57 48	6♐47	3 50	18 37	25 45	20 53	3 30	3 50
3	20 55 0	21 35	4 32	18 39	25 54	21 44	4 36	5 39
4	21 52 12	6♑26	4 56	18 41	26 2	22 15	5 41	7 31
5	22 49 26	21 11	5 0	18 43	26 11	22 56	6 46	9 25
6	23 46 40	5♒42	4 44	18 44	26 20	23 36	7 51	11 21
	24 43 54	19 51	4 12	18 46	26 29	24 17	8 56	13 20
8	25 41 8	3♓36	3 25	18 48	26 38	24 58	10 1	15 21
9	26 38 24	16 53	2 28	18 49	26 47	25 38	11 5	17 24
	27 35 40	29 46	1 26	18 50	26 56	26 19	12 9	19 28
1	28 32 57	12♈15	0 21	18 51	27 5	26 59	13 12	21 33
2	29 30 15	24 27	0 s 44	18 52	27 15	27 40	14 16	23 40
3	♌ 0 27 34	6♉26	1 46	18 53	27 24	28 20	15 20	25 47
	1 24 54	18 17	2 42	18 54	27 33	29 1	16 24	27 54
5	2 22 15	0♊7	3 31	18 54	27 43	29 41	17 27	0♌1
6	3 19 38	11 58	4 11	18 55	27 53	0♋21	18 30	2 7
7	4 17 2	23 57	4 41	18 55	28 3	1 1	19 32	4 13
8	5 14 26	6♋5	4 58	18 55	28 13	1 41	20 35	6 18
9	6 11 51	18 25	5 2	18 56	28 23	2 21	21 37	8 22
	7 9 17	0♌57	4 51	18 56	28 33	3 0	22 39	10 25
	8 6 44	13 43	4 26	18℞56	28 43	3 40	23 40	12 27

	♃ sets	♂ rises	♀ sets	☿ rises	♄'s declin.	♃'s declin.	♂'s declin.	♀'s declin.	☿'s declin.
	11 a 18	1 m 56	10 a 24	2 m 33	4 n 53	3 n 24	22 n 35	16 n 0	20 n 9
7	10 55	1 47	10 10	2 36	4 57	3 6	23 6	13 31	21 51
	10 32	1 38	9 57	2 40	5 1	2 46	23 30	10 52	23 5
	10 9	1 29	9 42	3 11	5 2	2 25	23 46	8 5	23 10
	9 47	1 21	9 26	3 47	5 3	2 1	23 54	5 13	21 49

The Lunations.

Firſt quarter the 7th day, at 26 minutes paſt 5 morning.
Full Moon the 13th day, at 37 minutes paſt 11 night.
Laſt quarter the 21ſt day, at 30 minutes paſt 4 afternoon.
New Moon the 29th day, at 33 minutes paſt 12 noon.

M D	Sundays & othe remark. days	☉ riſes	☉ ſets	☉'s declin.	☽'s declin.	☽ riſes & ſets	☽ South	Cl be
1	Lammas Day	4 19	7 41	18 n 0	9 n 5	7 a 57	1 a 7	5
2		4 21	7 39	17 45	5 11	8 25	1 55	5
3		4 22	7 38	17 30	0 59	8 51	2 44	5
4		4 24	7 36	17 14	3 s 20	9 17	3 33	5
5		4 26	7 34	16 57	7 32	9 47	4 24	5
6	Transfiguration	4 27	7 33	16 41	11 22	10 21	5 17	5
B	7 S. aft. Trin.	Ps. A. b.	7 31	16 24	14 36	10 59	6 12	5
8	Nat. of Jes.	4 31	7 29	16 7	16 59	11 45	7 9	5
9		4 32	7 28	15 50	18 2[illegible]	morn	8 8	5
10	St Laurence	4 34	7 26	15 33	18 30	0 37	9 7	4
11	Prs. Bruns. bn.	Dogd. e.	7 24	15 15	17 28	1 40	10 5	4
12	Pr. Wales bn.	O. Lam	7 23	14 57	15 21	2 49	11 1	4
13		4 39	7 21	14 39	12 20	☽ riſes	11 55	4
B	8 S. aft. Trin.	4 41	7 19	14 20	8 41	7 a 15	morn	4
15	Aſſumption	4 43	7 17	14 2	4 39	7 43	0 46	4
16	D. York. b.	4 45	7 15	13 43	0 30	8 9	1 35	3
17		4 46	7 14	13 24	3 n 33	8 34	2 22	3
18		4 48	7 12	13 4	7 22	9 1	3 8	3
19		4 50	7 10	12 45	10 46	9 29	3 54	3
20		4 52	7 8	12 25	13 39	9 59	4 39	3
B	9 S. af. Tr. D. C	b. 4 54	7 6	12 5	15 56	10 33	5 25	2
22		4 55	7 5	11 45	17 32	11 13	6 12	2
23		4 57	7 3	11 25	18 22	11 58	6 59	2
24	St. Bartholom.	4 59	7 1	11 4	18 23	morn	7 47	2
25		5 1	6 59	10 43	17 34	0 51	8 36	1
26		5 3	6 57	10 23	15 55	1 48	9 25	1
27		5 5	6 55	10 2	13 26	2 50	10 15	1
B	10 S. af. Trin.	St. Aug	6 53	9 40	10 15	3 56	11 4	0
29	Behead. J. Bap.	5 9	6 51	9 19	6 29	☾ ſets	11 53	0
30		5 10	6 50	8 58	2 18	7 a 0	0 a 44	0
31		5 12	6 48	8 36	2 s 3	7 29	1 35	0

Days	Day decreaſ.	Length of day	Helioc. long. ♄	Helioc. long. ♃	Helioc. long. ♂	Helioc. long. ⊖	Helioc. long. ♀	Helioc. long. ☿	ri
1	1 12	15 22	13 ♈ 6	7 ♎ 4	12 ♊ 13	9 ♒ 4	20 ♐ 40	0 ♍ 15	9
7	1 31	15 3	13 19	7 31	15 17	14 49	0 ♑ 11	26 41	9
13	1 51	14 43	13 31	7 58	18 20	20 35	9 40	18 ♎ 46	9
19	2 13	14 21	13 44	8 26	21 20	26 21	19 9	7 ♏ 56	8
25	2 35	13 59	13 56	8 53	24 19	2 ♓ 8	28 33	25 21	8

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. ☾'s node	♄'s latitude	♃'s latitude	♂'s latitude	♀'s latitude	☿'s latitude
1	1 23	10 34	2 58	16 ♎ 3	2 s 35	1 n 11	0 n 31	0 s 20	1 n 46
7	1 47	10 13	2 46	15 44	2 37	1 11	0 35	0 55	1 33
13	2 9	9 51	2 34	15 25	2 38	1 10	0 39	1 34	1 3
19	2 29	9 30	2 25	15 6	2 40	1 9	0 43	2 16	0 21
25	2 47	9 13	2 18	14 47	2 41	1 9	0 48	3 1	0 s 28

M D	☉'s longitude	☽'s long.	☽'s latitude	♄'s long.	♃'s long.	♂'s long.	♀'s long.	☿'s long.
1	♌ 9 4 13	26 ♌ 42	3 s 46	18 ♈ 56	28 ♍ 53	4 ♋ 20	24 ♍ 40	14 ♌ 28
2	10 1 42	9 ♍ 52	2 54	18 56	29 4	5 0	25 41	16 27
3	10 59 11	23 14	1 52	18 55	29 14	5 40	26 42	18 25
4	11 56 41	6 ♎ 46	0 42	18 55	29 25	6 19	27 42	20 21
5	12 54 12	20 20	0 n 31	18 54	29 35	6 59	28 42	22 15
6	13 51 44	4 ♏ 22	1 43	18 54	29 46	7 38	29 41	24 8
B	14 49 17	18 25	2 5	18 53	29 57	8 18	0 ♎ 40	26 1
8	15 46 50	2 ♐ 38	3 47	18 52	1 ♎ 8	8 57	1 39	27 52
9	16 44 25	16 58	4 31	18 51	1 19	9 36	2 37	29 41
10	17 42 0	1 ♑ 24	4 58	18 50	1 30	10 16	3 35	1 ♍ 27
11	18 39 36	15 49	5 5	18 49	1 41	10 55	4 32	3 12
12	19 37 13	0 ♒ 9	4 54	18 48	1 52	11 35	5 29	4 56
13	20 34 51	14 18	4 25	18 46	1 3	12 14	6 25	6 40
B	21 32 30	28 10	3 40	18 45	1 14	12 53	7 21	8 22
15	22 30 10	11 ♓ 42	2 44	18 43	1 26	13 32	8 16	10 [illegible]
16	23 27 52	24 52	1 40	18 42	1 37	14 11	9 11	11 49
17	24 25 36	7 ♈ 40	0 33	18 40	1 49	14 55	10 6	13 [illegible]
18	25 23 21	20 9	0 s 34	18 39	2 0	15 28	11 0	14 53
19	26 21 8	2 ♉ 21	1 39	18 37	2 12	16 7	11 54	16 [illegible]
20	27 18 57	14 21	2 38	18 36	2 24	16 46	12 47	18 [illegible]
B	28 16 47	26 14	3 29	18 34	2 35	17 24	13 39	19 31
22	29 14 39	8 ♊ 5	4 12	18 32	2 47	18 3	14 30	21 [illegible]
23	♍ 0 12 33	19 59	4 43	18 30	2 58	18 42	15 21	22 29
24	1 10 29	2 ♋ 0	5 3	18 27	3 10	19 20	16 12	23 56
25	2 8 27	14 13	5 10	18 24	3 22	19 59	17 2	25 22
26	3 6 26	26 40	5 2	18 22	3 34	20 37	17 51	26 46
27	4 4 27	9 ♌ 24	4 39	18 19	3 46	21 15	18 39	28 9
B	5 2 30	22 25	4 1	18 16	3 58	21 54	19 27	29 31
29	6 0 35	5 ♍ 44	3 10	18 13	4 10	22 32	20 14	0 ♎ 51
30	6 58 41	19 17	2 6	18 10	4 22	23 10	21 0	2 9
31	7 56 49	3 ♎ 3	0 55	18 7	4 34	23 48	21 45	3 25

Days	♃ sets	♂ rises	♀ sets	☿ sets	♄'s declin.	♃'s declin.	♂'s declin.	♀'s declin.	☿'s declin.
1	9 a 22	1 m 14	9 a 7	8 a 5	5 n 2	1 n 32	23 n 55	1 n 49	18 n [illegible]
7	9 1	1 10	8 50	8 2	4 59	1 6	23 47	1 s 6	14 19
13	8 40	1 6	8 32	7 58	4 55	0 30	23 32	3 59	10 [illegible]
19	8 19	1 2	8 15	7 48	4 50	0 11	23 17	6 47	5 49
25	7 58	0 56	7 56	7 37	4 44	0 s [illegible]	[illegible] 46	9 29	1 [illegible]

The Lunations.

First quarter the 5th day, at 37 minutes paſt 10 morning.
Full Moon the 12th day, at 3 minutes paſt 11 morning.
Laſt quarter the 20th day, at 11 minutes paſt 11 morning.
New Moon the 2, th day, at 43 minutes paſt 11 night.

M D	Sundays & other remark. days	☉ rises		☉ ſets		☉'s declin.		☽'s declin.		☽ riſes & ſets		☽ South		Clock aft. ☉	
1	Giles	5	14	6	46	8 n	14	6 s	21	7 a	59	2 a	27	0	15
2	Lond.bur. 1666	5	1	6	44	7	52	10	20	8	32	3	20	0	34
3		5	18	6	42	7	30	13	45	9	8	4	15	0	53
B	11 S. aft. Trin.	5	2	6	40	7	8	16	21	9	51	5	11	1	12
5		5	22	6	38	6	46	17	56	10	40	6	8	1	32
6		5	24	6	36	6	23	18	24	11	37	7	6	1	51
7	Enurchus	5	26	6	34	6	1	17	44	morn		8	4	2	11
8	Nativ. of V. M.	5	28	6	32	5	38	15	59	0	43	9	0	2	32
9		5	30	6	30	5	16	13	20	1	54	9	54	2	52
10		5	32	6	28	4	53	9	57	3	5	10	45	3	13
B	12 S. aft. Trin.	5	34	6	26	4	30	6	8	4	16	11	34	3	34
12		5	35	6	25	4	7	2	4	☾ riſes		morn		3	54
13		5	37	6	23	3	44	2 n	1	6 a	45	0	22	4	15
14	Holy Croſs	5	39	6	21	3	21	5	55	7	10	1	9	4	36
15		5	41	6	19	2	58	9	29	7	38	1	55	4	57
16		5	43	6	17	2	35	12	35	8	9	2	41	5	19
17	Lambert	5	45	6	15	2	1[illegible]	15	6	8	42	3	27	5	40
B	13 S. aft. Trin.	5	47	6	13	1	48	16	57	9	19	4	13	6	1
19		5	49	6	11	1	25	18	3	10	1	5	0	6	22
20		5	51	6	9	1	2	18	21	10	48	5	48	6	43
21	St. Matt. E. W.	5	53	6	7	0	38	17	51	11	43	6	36	7	4
22	K. Geo. 3 Cro.	5	55	6	5	0	15	16	31	morn		7	25	7	24
23		5	57	6	3	0 s	9	14	23	0	43	8	14	7	45
24		5	59	6	1	0	32	11	30	1	48	9	3	8	5
B	14 S. aft. Trin.	6	1	5	59	0	55	7	59	2	55	9	52	8	26
26	St. Cyprian	6	3	5	57	1	19	3	56	4	5	10	42	8	46
27		6	5	5	55	1	42	0 s	25	☾ ſets		11	33	9	6
28		6	7	5	53	2	6	4	50	6 a	5	0 a	26	9	25
29	St. Mich. Ps. C. Aug. b.			5	51	2	29	9	3	6	38	1	20	9	45
30	St. Jerome	6	11	5	49	2	53	12	45	7	14	2	16	10	4

Days	Day decreaſ.		Length of day		Helioc. long. ♄		Helioc. long. ♃		Helioc. long. ♂		Helioc. long. ⊖		Helioc. long. ♀		Helioc. long. ☿		♄ riſes	
1	3	2	13	32	14 ♈	11	9 ♎	25	27 ♊	45	8 ♓	55	9 ♒	41	14 ♐	42	8 a	1
7	3	25	13	9	14	23	9	52	0 ♋	40	14	44	19	10	1 ♑	20	7	38
13	3	48	12	46	14	35	10	19	3	34	20	35	28	40	18	47	7	16
19	4	12	12	22	14	48	10	46	6	27	26	20	8 ♓	10	7 ♒	57	6	54
[illegible]	4	36	11	58	15	0	11	14	9	17	2 ♈	15	17	41	29	52	6	32

September.

Day lig. begins	Day lig. ends	Durat. twilig.	Pl. ☽'s node	♄'s latitude	♃'s latitude	♂'s latitude	♀'s latitude	☿'s latitude
3 7	8 53	2 11	14♎25	2 s 43	1 n 8	0 n 52	3 s 56	1 n 29
3 24	8 36	2 6	14 5	2 44	1 8	0 57	4 43	2 21
3 37	8 23	2 4	13 46	2 45	1 7	1 1	5 31	3 8
3 52	8 8	2 1	13 27	2 46	1 7	1 5	6 17	3 41
4 5	7 55	2 0	13 8	2 47	1 7	1 10	6 58	3 45

☉'s longitude	☽'s long.	☽'s latitude	♄'s long.	♃'s long.	♂'s long.	♀'s long.	☿'s long.
♍ 8 54 59	16♎59	0 n 2	18♈ 4	4♎47	24♋26	22♎29	4♎39
9 53 10	1♏ 3	1 36	18 1	4 59	25 4	23 12	5 52
10 51 22	15 11	2 40	17 58	5 11	25 42	23 54	7 3
11 49 36	29 22	3 46	17 54	5 24	26 20	24 35	8 13
12 47 51	13♐34	4 33	17 51	5 36	26 58	25 15	9 21
13 46 8	27 44	5 2	17 48	5 48	27 35	25 54	10 26
14 44 26	11♑51	5 13	17 44	6 1	28 13	26 34	11 27
15 12 46	25 52	5 6	17 41	6 14	28 50	27 12	12 26
16 41 7	9♒45	4 40	17 37	6 26	29 28	27 49	13 24
17 39 30	23 26	3 59	17 33	6 39	0♌ 5	28 24	14 20
18 37 55	6♓53	3 5	17 30	6 51	0 43	28 57	15 12
19 36 21	20 5	2 2	17 26	7 4	1 20	29 28	16 0
20 34 49	3♈ 0	0 54	7 22	7 17	1 57	29 57	16 45
21 33 19	15 38	0 s 15	17 18	7 29	2 34	0♏25	17 26
22 31 51	28 1	1 23	17 14	7 42	3 11	0 52	18 4
23 30 25	10♉10	2 25	17 10	7 55	3 48	1 18	18 38
24 29 1	22 10	3 26	17 6	8 8	4 25	1 42	19 7
25 27 40	4♊ 3	4 6	17 2	8 21	5 2	2 5	19 31
26 26 21	15 54	4 42	16 57	8 34	5 39	2 26	19 50
27 25 4	27 48	5 5	16 53	8 46	6 16	2 45	20 3
28 23 50	9♋49	5 16	16 48	8 59	6 52	3 2	20 R 10
29 22 38	22 2	5 12	16 44	9 12	7 29	3 17	20 10
♎ 0 21 28	4♌31	4 54	16 39	9 25	8 5	3 30	20 3
1 20 20	17 19	4 21	16 34	9 38	8 42	3 41	19 50
2 19 15	0♍29	3 34	16 30	9 51	9 18	3 50	19 30
3 18 12	14 1	2 33	16 25	10 3	9 55	3 57	19 2
4 17 11	27 53	1 22	16 21	10 16	10 31	4 1	18 26
5 16 13	12♎ 3	0 4	16 16	10 29	11 7	4 R 3	17 42
6 15 16	26 27	1 n 15	16 12	10 42	11 43	4 3	16 51
7 14 21	10♏58	2 30	16 7	10 55	12 19	4 1	15 55

♃ ſets	♂ riſes	♀ ſets	☿ ſets	♄'s declin.	♃'s declin.	♂'s declin.	♀'s declin.	☿'s declin.
7 a 35	0 m 57	7 a 34	7 a 20	4 n 35	0 s 52	22 n 7	12 s 24	3 s 13
7 15	0 56	7 14	7 3	4 26	1 22	21 28	14 39	6 42
6 55	0 55	6 53	6 46	4 17	1 52	20 44	16 37	9 29
6 36	0 54	6 31	6 26	4 7	2 22	19 56	18 13	11 11
6 17	0 53	6 6	6 3	3 56	2 53	19 4	19 21	11 6

The Lunations.

First quarter the 4th day, at 44 minutes paſt 4 afternoon.
Full Moon the 12th day, at 42 minutes paſt 1 morning.
Laſt quarter the 20th day, at 49 minutes paſt 5 morning.
New Moon the 27th day, at 22 minutes paſt 10 morning.

M D	Sundays & other remark. days	☉ riſes	☉ ſets	☉'s declin.	☽'s declin.	☽ riſes & ſets	☽ South	Clo aft.
1	Remigius	6 13	5 47	3 s 16	15 s 40	7 a 58	3 a 13	10
B	15 S. aft. Trin.	6 15	5 45	3 39	17 34	8 48	4 13	10
3		6 17	5 43	4 3	18 19	9 42	5 11	11
4		6 19	5 41	4 26	17 55	10 46	6 9	11
5		6 21	5 39	4 49	16 26	11 54	7 5	11
6	Faith	6 23	5 37	5 12	14 0	morn	7 58	11
7		6 25	5 35	5 35	10 52	1 3	8 49	12
8		6 27	5 33	5 58	7 13	2 12	9 38	12
B	16 S. aft. Trin.	S. Den	5 32	6 21	3 16	3 22	10 26	12
10	Ox. & Cam. T. b.	O. Mic.	5 30	6 44	0 n 45	4 33	11 12	12
11		6 32	5 28	7 6	4 41	5 40	11 58	13
12		6 34	5 26	7 29	8 22	☽ riſes	morn	13
13	Tr. K. Edward	6 36	5 24	7 52	11 37	6 a 17	0 43	13
14		6 38	5 22	8 14	14 20	6 49	1 29	13
15		6 40	5 20	8 36	16 25	7 24	2 16	14
B	17 S. aft. Trin.	6 42	5 18	8 58	17 46	8 4	3 2	14
17	Etheldred.	6 44	5 16	9 20	18 20	8 50	3 50	14
18	St. Luke	6 46	5 14	9 42	18 7	9 42	4 38	14
19		6 48	5 12	10 4	17 5	10 38	5 25	14
20		6 50	5 10	10 26	15 15	11 39	6 13	15
21		6 52	5 8	10 47	12 42	morn	7 0	15
22		6 54	5 6	11 9	9 29	0 42	7 48	15
B	18 S. aft. Trin.	6 55	5 5	11 30	5 42	1 50	8 38	15
24		6 57	5 3	11 51	1 30	3 2	9 27	15
25	K. Geo. 3 Ac.	Criſpin	5 1	12 11	2 s 54	4 17	10 18	15
26	K. Geo. 3 Pro.	7 1	4 59	12 32	7 17	5 33	11 11	15
27		7 3	4 57	12 53	11 19	☽ ſets	0 a 7	15
28	St. Sim. & Jude	7 5	4 55	13 13	14 41	5 a 54	1 5	16
29		7 7	4 53	13 33	17 4	6 41	2 5	16
B	19 S. aft. Trin.	7 9	4 51	13 53	18 16	7 37	3 6	16
31		7 10	4 50	14 12	18 12	8 40	4 6	16

Days	Day decreaſ.	Length of day	Helioc. long. ♄	Helioc. long. ♃	Helioc. long. ♂	Helioc. long. ⊖	Helioc. long. ♀	Helioc. long. ☿
1	4 49	11 35	15♈13	11♎41	12♋7	8♈13	27♓13	25♓48
7	5 23	11 11	15 25	12 8	14 55	14 9	6♈45	26♈52
13	5 46	10 48	15 38	12 35	17 43	20 5	16 18	2♊48
19	6 9	10 25	15 51	13 2	20 29	26 3	25 53	10♋27
25	6 32	10 2	16 3	13 29	23 14	2♉2	5♉28	15♌4

Days	Daylig. begins	Day lig. ends	Durat. twilig.	Pl. ☽'s node	♄'s latitude	♃'s latitude	♂'s latitude	♀'s latitude	☿'s latitude
1	4 18	7 42	1 59	12♎49	2 s 47	1 n 7	1 n 15	7 s 28	2 s 54
7	4 31	7 29	1 58	12 30	2 47	1 7	1 19	7 41	1 5
13	4 43	7 17	1 57	12 11	2 47	1 7	1 23	7 29	0 n 47
19	4 55	7 5	1 57	11 52	2 47	1 7	1 28	6 50	1 52
25	5 6	6 54	1 58	11 33	2 56	1 7	1 33	5 38	2 6

M D	☉'s longitue.			☽'s long.	☽'s latitude	♄'s long.	♃'s long.	♂'s long.	♀'s long.	☿'s long.
1	♎ 8	13	28	25♏32	3 n 36	16♈	11♎8	12♌55	3♏50	14♎53
B	9	12	37	10♐2	4 27	15 58	11 21	13 31	3 49	13 48
3	10	11	47	24 24	5 1	15 54	11 34	14 7	3 39	12 46
4	11	11	0	8♑36	5 17	15 49	11 47	14 42	3 27	11 28
5	12	10	14	22 35	5 13	15 44	12 0	15 18	3 13	10 18
6	13	9	29	6♒20	4 51	5 39	12 13	15 53	2 56	9 11
7	14	8	46	19 51	4 14	15 34	12 27	16 29	2 37	8 9
8	15	8	6	3♓7	3 23	15 29	12 40	17 4	2 10	7 14
B	16	7	27	16 9	2 23	15 25	12 53	17 39	1 53	6 26
10	17	6	50	28 58	1 16	15 20	13 6	18 14	1 27	5 46
11	18	6	15	11♈34	0 7	15 15	13 19	18 49	0 59	5 18
12	19	5	41	23 58	1 s 1	15 11	13 22	19 24	0 30	5 1
13	20	5	10	6♉11	2 6	15 6	13 44	19 59	29♎59	4D54
14	21	4	41	18 15	3 4	15 1	13 57	20 34	29 27	4 58
15	22	4	14	0♊12	3 53	14 57	14 10	21 8	28 54	5 13
B	23	3	49	12 4	4 32	14 52	14 23	21 43	28 20	5 38
17	24	3	27	23 55	5 0	14 47	14 36	22 18	27 45	6 13
18	25	3	7	5♋47	5 14	14 43	14 49	22 52	27 8	6 57
19	26	2	49	17 47	5 15	14 38	15 2	23 27	26 30	7 50
20	27	2	34	29 57	5 2	14 33	15 15	24 1	25 50	8 50
21	28	2	21	12♌22	4 35	14 29	15 28	24 36	25 11	9 55
22	29	2	11	25 7	3 54	14 24	15 40	25 10	24 34	11 5
B	♏ 0	2	3	8♍16	3 0	14 20	15 53	25 44	23 59	12 20
24	1	1	57	21 50	1 53	14 15	16 6	26 18	23 27	13 40
25	2	1	53	5♎50	0 39	14 11	16 18	26 52	22 57	15 5
26	3	1	51	20 14	0 n 41	14 7	16 31	27 25	22 27	16 32
27	4	1	52	4♏58	1 59	14 2	16 44	27 59	21 58	18 11
28	5	1	54	19 55	3 10	13 58	16 57	28 32	21 30	19 32
29	6	1	58	4♐56	4 9	13 53	17 10	29 6	21 3	21 5
B	7	2	4	19 52	4 50	13 49	17 23	29 39	20 37	22 39
31	8	2	11	4♑35	5 11	13 45	17 36	0♍12	20 12	24 14

Days	♃ rises	♂ rises	♀ sets	☿ sets	♄'s declin.	♃'s declin.	♂'s declin.	♀'s declin.	☿'s declin.
1	6m 27	0 n 52	5 a 40	5 a 39	3 n 45	3 s 23	18 n 9	19 s 52	8 s 33
7	6 11	0 50	5 15	rises	3 34	3 54	17 10	19 36	4 14
13	5 56	0 48	4 49	5m 9	3 23	4 24	16 9	18 28	1 13
19	5 41	0 46	rises	5 10	3 12	4 54	15 6	16 35	1 n 24
25	5 26	0 43	6m 28	5 12	3 3	5 23	14 1	14 9	4 [illegible]

November hath xxx Days.

The Lunations.

First quarter the 3d day, at 8 minutes paſt 1 morning.
Full Moon the 10th day, at 7 minutes paſt 7 night.
Laſt quarter the 18 h day, at 12 minutes paſt 11 night.
New Moon the 25th day, at 38 minutes paſt 8 night.

M D	Sundays & other remark. days	☉ riſes	☉ ſets	☉'s declin.	☽'s declin.	☽ riſes & ſets	☽ South	Clock aft. ☉
1	All Saints	7 12	4 48	14 s 31	16 s 58	9 a 49	5 a 4	16 13
2	Pr. Edw. b.	all Soul	4 46	14 51	14 43	10 58	5 59	16 14
3	Prs. Sophia b.	7 16	4 44	15 9	11 42	morn	6 50	16 14
4		7 18	4 42	15 28	8 9	0 10	7 40	16 13
5	Powder Plot	7 19	4 4	15 46	4 16	1 20	8 27	16 11
B	20 S. aft. Trin.	Leonar.	4 39	16 4	0 17	2 27	9 13	16 8
7	D. Cum. born	M.T.	4 37	16 22	3 n 40	3 34	9 58	16 5
8	Prs. Aug. So. b.	7 24	4 36	16 4[illegible]	7 24	4 39	10 42	16 1
9	Ld. Mayor's day	7 26	4 34	16 57	10 46	5 42	11 27	15 55
10		7 28	4 32	17 14	13 39	☽ riſes	morn	15 50
11	St. Martin.	7 30	4 30	17 31	15 50	5 a 25	0 13	15 43
12		7 31	4 29	17 47	17 32	6 2	0 59	15 35
B	21 S. aft. Trin.	Britius	4 27	18 3	18 21	6 44	1 46	15 27
14		7 34	4 26	18 19	18 22	7 33	2 34	15 17
15	Machutus	7 36	4 24	18 34	17 15	8 27	3 21	15 7
16		7 37	4 23	18 49	16 1	9 25	4 8	14 56
17	Hugh B. of Lin.	7 39	4 21	19 4	13 44	10 26	4 54	14 44
18		7 40	4 20	19 19	10 47	11 30	5 40	14 31
19		7 42	4 18	19 33	7 17	morn	6 27	14 18
B	22 S. aft. Trin.	Edm.	4 17	19 46	3 20	0 38	7 14	14 3
21		7 45	4 15	20 0	0 s 55	1 48	8 2	13 48
22	Cecilia. Old	Mart.	4 14	20 13	8 17	3 [illegible]	8 53	13 32
23	St. Clement.	7 47	4 13	20 25	9 28	4 18	9 46	13 15
24		7 49	4 11	20 38	13 13	5 35	10 42	12 57
25	D. Gloſ. born	Cathe:	4 10	20 4[illegible]	16 9	☽ ſets	11 42	12 39
26		7 51	4 9	21 1	17 58	5 a 16	0 a 43	12 20
B	Adv. Sunday.	7 52	4 8	21 12	18 29	6 16	1 45	12 0
28	Mic. Term ends	7 54	4 6	21 23	17 41	7 24	2 46	11 39
29		7 55	4 5	21 33	15 43	8 37	3 45	11 18
30	St. Andrew.	7 56	4 4	21 43	12 5[illegible]	9 52	4 40	10 56

Days	Day decreaſ.	Length of day	Helioc. long. ♄	Helioc. long. ♃	Helioc. long. ♂	Helioc. long. ⊖	Helioc. long. ♀	Helioc. long. ☿	♄ ſets
1	6 57	9 3	16 ♈ 17	14 ♎ 1	26 ♋ 25	9 ♉ 2	16 ♉ 41	18 ♍ 30	4 m 40
7	7 20	9 14	16 30	14 2[illegible]	29 8	15 4	26 19	11 ♎ 52	4 21
13	7 39	8 55	16 42	14 55	1 ♌ 50	21 6	5 ♊ 58	1 ♏ 51	3 55
[illegible]	7 58	8 36	16 55	15 23	4 31	27 10	15 38	19 44	3 29
[illegible]	8 14	8 20	17 7	15 50	7 12	3 ♊ 14	25 19	6 ♐ 32	3 3

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. ☽'s node	♄'s latitude	♃'s latitude	♂'s latitude	♀'s latitude	☿'s latitude
1	5 17	6 43	1 59	11♎11	2 s 46	1 n 8	1 n 38	3 s 57	1 45
7	5 25	6 35	2 2	10 52	2 45	1 8	1 43	2 28	1 11
13	5 34	6 26	2 3	10 33	2 44	1 8	1 48	1 5	0 s 32
19	5 41	6 19	2 5	10 14	2 42	1 9	1 54	0 n 6	0 9
25	5 48	6 12	2 7	9 54	2 41	1 10	1 59	1 4	47

M D	☉'s longitude	☽'s long.	☽'s latitude	♄'s long.	♃'s long.	♂'s long.	♀'s long.	☿'s long.
1	♏ 9 2 2[illegible]	19♑ 0	5 n 1[illegible]	13♈41	17♎48	0♍45	19♎49	25♎49
2	10 2 31	3♒ 4	4 54	13 37	18 1	1 18	19 36	27 26
3	11 2 43	16 45	4 20	13 33	18 13	1 50	19 14	2 3
4	12 2 57	0♓ 5	3 32	13 29	18 26	2 23	19 0	0♏40
5	13 3 12	13 5	2 35	13 25	18 38	2 55	18 48	2 17
B	14 3 28	25 48	1 31	13 22	18 51	3 28	18 39	3 54
7	15 3 46	8♈18	0 24	13 18	19 3	4 0	18 32	5 32
8	16 4 5	20 37	0 s 44	13 15	19 15	4 32	18 27	7 9
9	17 4 26	2♉47	1 48	13 11	19 28	5 4	18 D 25	8 46
10	18 4 49	14 50	2 46	13 8	19 40	6 36	18 26	10 24
11	19 5 13	26 47	3 37	13 4	19 52	6 8	18 30	12 1
12	20 5 39	8♊41	4 18	13 1	20 4	6 40	18 36	13 38
B	21 6 7	20 32	4 48	12 58	20 16	7 11	18 44	15 14
14	22 6 37	2♋24	5 5	12 55	20 28	7 42	18 54	16 50
15	23 7 8	14 17	5 9	12 52	20 40	8 13	19 6	18 26
16	24 7 41	26 16	5 0	12 49	20 52	8 44	19 20	20 2
17	25 8 16	8♌24	4 37	12 46	21 4	9 15	19 37	21 38
18	26 8 53	20 46	4 1	12 43	21 16	9 46	19 56	23 14
19	27 9 32	3♍24	3 12	12 40	21 27	10 17	20 17	24 49
B	28 10 13	16 25	2 13	12 38	21 39	10 47	20 40	26 24
21	29 10 55	29 51	1 4	12 35	21 51	11 17	21 4	27 59
22	♐ 0 11 39	13♎46	0 n 11	12 33	22 3	11 47	21 30	29 34
23	1 12 24	28 9	1 27	12 30	22 15	12 [illegible]	[illegible]	[illegible]♐ 9
24	2 13 11	12♏58	2 40	12 28	22 27	12 47	22 28	2 43
25	3 14 0	28 6	3 42	12 26	22 36	13 17	22 59	17
26	4 14 50	13♐24	4 30	12 24	22 48	13 46	23 31	5 52
B	5 15 41	28 41	4 58	12 23	22 59	14 15	24 5	7 26
28	6 16 33	13♑45	5 5	12 20	23 10	14 44	24 40	9 0
29	7 17 26	28 29	4 52	12 18	23 21	15 13	25 17	10 34
30	8 18 21	12♒46	4 20	12 16	23 32	15 42	25 56	12 8

Days	♃ tiſes	♂ riſe	♀ riſes	☿ rites	♄'s declin.	♃'s declin.	♂'s declin.	♀'s declin	☿'s declin.
1	5 m 0	0 m 39	5 m 35	5 m 51	2 n 52	5 s 57	12 n 45	11 s 2	8 s 21
7	4 51	0 32	5 1	6 24	2 44	6 25	11 39	9 33	12 16
13	4 33	0 25	4 33	6 57	2 37	6 52	10 34	8 21	15 55
19	4 15	0 18	4 14	7 30	2 31	7 19	9 29	7 51	19 8
25	3 57	0 11	4 0	ſets	2 27	7 44	8 25	7 5	21 48

December hath xxxi Days.

The Lunations.

Firſt quarter the 2d day, at 51 minutes paſt 12 noon.
Full Moon the 10th day, at 4 minutes paſt 2 afternoon.
Laſt quarter the 18th day, at 17 minutes paſt 2 afternoon.
New Moon the 25th day, at 49 minutes paſt 6 morning

M D	Sundays & other remark. days	☉ riſes	☉ ſets	☉'s declin.	☽'s declin.	☽ riſes & ſets	☽ South	Clock aft. ☉
1		7 57	4 3	21 s 52	9 s 18	11 a 0	5 a 31	10 33
2		7 58	4 2	22 1	5 25	morn	6 18	10 10
3		7 59	4 1	22 10	1 23	0 11	7 5	9 46
B	1 Sund. in Adv.	8 0	4 0	22 18	2 37	1 20	7 50	9 22
5		8 1	3 59	22 26	6 n 25	2 25	8 34	8 57
6	Nicholas	8 2	3 58	22 33	9 54	3 27	9 18	8 31
7		8 2	3 58	22 40	12 55	4 28	10 3	8 5
8	Conception	8 3	3 57	22 46	15 24	5 29	10 49	7 39
9		8 4	3 56	22 52	17 12	6 27	11 35	7 12
10		8 4	3 56	22 58	18 16	☽ riſes	morn	6 45
B	2 Sund. in Adv.	8 5	3 55	23 3	18 31	5 a 19	0 21	6 17
12		8 5	3 55	23 7	17 59	6 11	1 8	5 49
13	Lucy	8 6	3 54	23 12	16 38	7 8	1 55	5 20
14	Ember Week	8 6	3 54	23 15	14 33	8 7	2 42	4 52
15		8 7	3 53	23 18	11 48	9 9	3 28	4 23
16	Camb. T. ends	O Sapi.	3 53	23 21	8 30	10 14	4 13	3 54
17	Oxf. Term ends	8 7	3 53	23 23	4 46	11 21	4 59	3 24
B	3 Sund. in Adv.	8 8	3 52	23 25	0 42	morn	5 45	2 54
19		8 8	3 52	23 27	3 s 31	0 32	6 32	2 24
20		8 8	3 52	23 27	7 41	1 43	7 22	1 54
21	St. Thomas	Shor. d.	3 52	23 28	11 33	2 57	8 14	1 24
22		8 8	3 52	23 28	14 50	4 12	9 10	0 54
23		8 8	3 52	23 27	17 13	5 27	10 9	0 24
24		8 8	3 52	23 26	18 25	6 40	11 11	obef.
B	Chriſtmas Day	8 8	3 52	23 25	18 18	☽ ſets	0 a 13	0 3
26	St. Stephen	8 7	3 53	23 23	16 51	5 a 58	1 14	1 6
27	St. John	8 7	3 53	23 20	14 17	7 14	2 13	1 36
28	Innocents	8 7	3 53	23 17	10 54	8 28	3 8	2 6
29		8 6	3 54	23 14	7 0	9 39	3 59	2 35
30		8 6	3 54	23 10	2 52	10 49	4 47	3 5
31	Silveſter	8 5	3 55	23 6	1 n 16	11 57	5 33	3 34

Days	Day decreaſ.	Length of day	Helioc. long. ♄	Helioc. long. ♃	Helioc. long. ♂	Helioc. long. ⊖	Helioc. long. ♀	Helioc. long. ☿	♄ ſets
1	8 28	8 6	17 ♈ 20	16 ♎ 18	9 ♌ 52	9 ♊ 19	5 ♋ 1	23 ♐ 2	2 m 3
7	8 38	7 56	17 32	16 45	12 31	15 25	14 45	9 ♑ 59	2
13	8 46	7 48	17 45	17 12	15 10	21 31	24 29	28 12	1 4
19	8 50	7 44	17 57	17 39	17 49	27 38	4 ♌ 14	18 ♒ 37	1 1
25	8 50	7 44	18 10	18 7	20 27	3 ♋ 45	14 0	12 ♓ 25	0 5

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. ☽'s node	♄'s latitude	♃'s latitude	♂'s latitude	♀'s latitude	☿'s latitude
1	5 54	6 6	2 18	9♎35	2 s 40	1 n 10	2 n 5	1 n 50	1 s 22
7	5 57	6 3	2 10	9 16	2 38	1 11	2 11	2 25	1 50
3	5 59	6 1	2 12	8 57	2 36	1 12	2 18	2 51	2 8
9	6 1	5 59	2 11	8 38	2 35	1 13	2 24	3 8	2 13
	6 1	5 59	2 11	8 19	2 33	1 14	2 31	3 17	2 0

M D	☉'s longitude	☽'s long.	☽'s latitude	♄'s long.	♃'s long.	♂'s long.	♀'s long.	☿'s long.
1	♐ 9 19 16	26♒34	3 n 35	12♈15	23♎43	16♍[illegible]	26♎[illegible]	[illegible]
2	10 20 12	9♓55	2 38	12 13	23 54	16 39	27 17	15 16
3	11 21 8	22 51	1 35	12 12	24 5	17 7	27 59	16 50
	12 22 5	5♈26	0 30	12 11	24 15	17 34	28 42	18 24
5	13 23 3	17 46	0 s 36	12 10	24 26	18 2	29 26	19 58
6	14 24 2	29 53	1 39	12 9	24 37	18 30	0♏11	21 32
7	15 25 1	11♉53	2 37	12 8	24 47	18 57	0 56	23 6
8	16 26 1	23 4	3 27	12 7	24 57	19 24	1 43	24 40
9	17 27 1	5♊40	4 8	12 7	25 7	19 50	2 31	26 14
0	18 28 2	17 32	4 38	12 6	25 17	20 17	3 20	27 48
	19 29 4	29 25	4 56	12 6	25 27	20 43	4 10	29 22
2	20 30 7	11♋20	5 1	12 5	25 37	21 9	5 0	0♑56
3	21 31 11	23 19	4 53	12 5	25 47	21 35	5 51	2 30
4	22 32 15	5♌33	4 34	12 5	25 52	22 0	6 43	4 4
5	23 33 20	17 34	3 58	12 D 5	26 6	22 25	7 36	5 38
6	24 34 26	29 56	3 12	12 5	26 16	22 50	8 30	7 12
7	25 35 33	12♍33	2 16	12 5	26 25	23 15	9 24	8 46
	26 36 41	25 27	1 12	12 6	26 35	23 40	10 19	10 19
9	27 37 50	8♎44	0 3	12 6	26 44	24 5	11 14	11 52
0	28 39 0	22 27	1 n 9	12 7	26 53	24 29	12 10	13 25
1	29 40 11	6♏37	2 19	12 7	27 2	24 53	13 7	14 57
2	♑ 0 41 22	21 15	3 22	12 8	27 10	25 16	14 4	16 28
3	1 42 34	6♐15	4 13	12 9	27 19	25 39	15 2	17 59
4	2 43 46	21 30	4 47	12 10	27 28	26 2	16 0	19 28
	3 44 58	6♑50	5 0	12 11	27 36	26 24	16 59	20 56
6	4 46 11	22 3	4 52	12 12	27 45	26 46	17 58	22 23
7	5 47 24	6♒58	4 24	12 14	27 53	27 8	18 58	23 48
8	6 48 37	21 27	3 39	12 15	28 1	27 22	19 58	25 10
9	7 49 49	8♓27	2 43	12 17	28 9	27 50	20 59	26 30
0	8 51 1	18 56	1 39	12 18	28 17	28 10	22 0	27 47
1	9 52 13	1♈5[illegible]	0 32	12 20	28 25	28 30	23 2	29 6

	♃ rises	♂ rises	♀ rises	☿ sets	♄'s declin.	♃'s declin.	♂'s declin.	♀'s declin.	☿s' declin.
1	3m 39	0 m 3	3m 53	4 a 7	2 n 24	8 s 8	7 n 23	8 s 34	23 s 50
7	3 18	11 a 50	3 48	4 15	2 23	8 30	6 23	9 33	25 7
3	2 57	11 37	3 47	4 23	2 23	8 52	5 27	10 48	25 35
	2 36	11 24	3 50	4 43	2 25	9 11	4 34	12 15	25 9
5	2 15	11 10	3 55	5 5	2 28	9 29	3 45	13 47	[illegible] 48

The Georgian or New Planet.

Months	Days	Helicoentric longitude °	′	latitude °	′	Geocentric longitude °	′	latitude °	′	Declin. °	′	Southi h
January	1	11 ♌	50	0	n 40	13 ♌	28	0	n 41	17	n 27	14
	11	11	58	0	40	13	0	0	42	17	34	13
	21	12	5	0	40	12	41	0	42	17	41	12
February	1	12	14	0	40	12	12	0	42	17	50	11
	11	12	22	0	40	11	46	0	42	17	57	11
	21	12	29	0	40	11	21	0	42	18	4	10
March	1	12	35	0	40	11	3	0	42	18	9	10
	11	12	43	0	40	10	43	0	42	18	14	9
	21	12	51	0	40	10	27	0	41	18	18	8
April	1	12	59	0	40	10	15	0	41	18	21	8
	11	13	7	0	40	10	9	0	41	18	23	7
	21	13	14	0	40	10	8	0	41	18	23	6
May	1	13	22	0	40	10	13	0	40	18	21	6
	11	13	30	0	40	10	23	0	40	18	18	5
	21	13	37	0	40	10	39	0	40	18	3	5
June	1	13	46	0	40	11	1	0	39	18	7	4
	11	13	53	0	40	11	26	0	39	18	0	3
	21	14	1	0	40	11	54	0	39	17	52	2
July	1	14	9	0	41	12	25	0	39	17	43	2
	11	14	17	0	41	12	59	0	39	17	33	1
	21	14	24	0	41	13	35	0	39	17	22	1
Auguſt	1	14	33	0	41	14	15	0	39	17	11	0
	11	14	40	0	41	14	53	0	39	17	0	23
	21	14	48	0	41	15	30	0	39	16	49	23
September	1	14	56	0	41	16	10	0	39	16	38	22
	11	15	4	0	41	16	44	0	39	16	28	21
	21	15	12	0	41	17	15	0	39	16	19	21
October	1	15	19	0	41	17	44	0	40	16	10	20
	11	15	27	0	41	18	9	0	40	16	2	20
	21	15	35	0	41	18	30	0	40	15	56	19
November	1	15	43	0	41	18	47	0	41	15	52	18
	11	15	51	0	41	18	56	0	41	15	49	18
	21	15	59	0	41	19	1	0	42	15	48	17
December	1	16	6	0	41	19	0	0	42	15	49	16
	11	16	14	0	41	18	53	0	42	15	51	16
	21	16	22	0	41	18	41	0	43	15	55	15
	31	16	29	0	41	18	24	0	43	16	1	14

Time of High-Water at LONDON in the morning and afternoon of every day in the year.

Mo. Days	January morn. h	m	aftern. h	m	February morn. h	m	aftern. h	m	March morn. h	m	aftern. h	m	April morn. h	m	aftern. h	m	Mo. Days
1	10	53	11	35	0	11	0	44	11	19	11	51	0	27	0	52	1
2			0	7	1	12	1	40			0	22	1	15	1	37	2
3	0	39	1	10	2	6	2	32	0	52	1	21	2	0	2	23	3
4	1	40	2	11	2	50	3	8	1	44	2	4	2	42	2	59	4
5	2	35	2	59	3	24	3	38	2	26	2	45	3	15	3	29	5
6	3	17	3	33	3	52	4	6	3	1	3	16	3	43	3	56	6
7	3	49	4	5	4	23	4	40	3	31	3	45	4	12	4	29	7
8	4	22	4	40	4	57	5	13	3	59	4	12	4	37	5	6	8
9	4	57	5	14	5	31	5	51	4	28	4	47	5	25	5	45	9
10	5	33	5	53	6	12	6	37	5	5	5	23	6	10	6	35	10
11	6	15	6	37	7	2	7	27	5	44	6	7	7	1	7	28	11
12	6	59	7	23	7	57	8	28	6	32	6	58	7	58	8	30	12
13	7	50	8	18	9	0	9	32	7	20	7	53	9	2	9	36	13
14	8	48	9	18	10	4	10	37	8	24	8	57	9	59	10	43	14
15	9	49	10	20	11	[illegible]	11	44	9	31	10	5	11	16	11	48	15
16	10	51	11	22			0	13	10	38	11	10			0	18	16
17	11	52			0	42	1	9	11	43			0	48	1	17	17
18	0	22	0	50	1	36	2	3	0	15	0	44	1	45	2	13	18
19	1	16	1	42	2	29	2	49	1	11	1	39	2	40	3	3	19
20	2	8	2	31	3	7	3	25	2	6	2	24	3	23	3	42	20
21	2	53	3	11	3	41	3	58	2	53	3	12	4	0	4	23	21
22	3	26	3	42	4	14	4	35	3	30	3	48	4	45	5	8	22
23	3	57	4	15	4	56	5	19	4	5	3	28	5	32	5	59	23
24	4	33	4	52	5	42	6	11	4	50	5	13	6	28	6	57	24
25	5	12	5	34	6	40	7	1	5	37	6	6	7	26	7	58	25
26	5	57	6	24	7	43	8	8	6	35	7	6	8	29	9	1	26
27	6	52	7	24	8	55	9	32	7	38	8	12	9	34	10	4	27
28	7	56	8	31	10	9	10	44	8	47	9	22	10	33	11	2	28
29	9	9	9	47					9	57	10	29	11	30	11	57	29
30	10	25	11	2					11	0	11	31	0	22			30
31	11	38									0	1					31

This Table may ſerve the following Places, by adding

	h	m
For Tinmouth Haven, Hartle-pool, *and* Amſterdam	0	30
Breſt — — — — — — — —	1	0
Scilly — — — — — — — —	1	45
Mount's Bay — — — — — — — —	1	55
Bridlington Pier *and* Humber — — —	2	0

Time of High-Water at LONDON in the morning and afternoon of every day in the year.

Mo. Days	MAY				JUNE				JULY				AUGUST				Mo. Days
	morn.		aftern.		morn.		aftern.		morn.		aftern.		morn.		aftern.		
	h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m	
1	0	47	1	9	1	46	2	9	2	0	2	24	2	58	3	15	1
2	1	32	1	53	2	31	2	52	2	43	3	2	3	31	3	46	2
3	2	15	2	38	3	9	3	24	3	19	3	34	4	2	4	17	3
4	2	55	3	11	3	39	3	53	3	50	4	3	4	35	4	55	4
5	3	27	3	42	4	9	4	27	4	21	4	39	5	15	5	36	5
6	3	57	4	11	4	45	5	4	4	57	5	15	6	2	6	29	6
7	4	27	4	48	5	23	5	43	5	36	5	58	6	58	7	28	7
8	5	6	5	26	6	6	6	30	6	23	6	49	8	3	8	40	8
9	5	47	6	11	6	55	7	21	7	18	7	47	9	18	9	59	9
10	6	36	7	2	7	52	8	23	8	21	8	57	10	37	11	15	10
11	7	30	8	0	8	57	9	32	9	34	10	14	11	50			11
12	8	31	9	2	10	7	10	43	10	52	11	30	0	25	0	55	12
13	9	35	10	9	11	19	11	56			0	5	1	25	1	53	13
14	10	42	11	16			0	29	0	40	1	13	2	20	2	42	14
15	11	49			1	2	1	34	1	43	2	13	3	1	3	18	15
16	0	23	0	54	2	5	2	32	2	40	3	2	3	33	3	48	16
17	1	25	1	55	2	58	3	19	3	20	3	37	4	2	4	19	17
18	2	26	2	51	3	38	3	56	3	53	4	10	4	36	4	53	18
19	3	12	3	34	4	13	4	34	4	27	4	45	5	11	5	30	19
20	3	52	4	14	4	55	5	15	5	3	5	21	5	50	6	13	20
21	4	34	4	56	5	35	5	58	5	40	6	2	6	37	7	2	21
22	5	18	5	42	6	21	6	45	6	25	6	48	7	29	7	58	22
23	6	6	6	32	7	9	7	34	7	12	7	38	8	28	8	59	23
24	6	59	7	25	8	0	8	27	8	5	8	34	9	31	10	3	24
25	7	53	8	21	8	55	9	25	9	4	9	35	10	35	11	7	25
26	8	51	9	2	9	56	10	24	10	7	10	37	11	38			26
27	9	52	10	20	10	53	11	23	11	7	11	39	0	7	0	36	27
28	10	47	11	15	11	52					0	10	1	3	1	28	28
29	11	44			0	19	0	45	0	37	1	3	1	54	2	18	29
30	0	9	0	34	1	10	1	35	1	28	1	53	2	40	2	59	30
31	0	58	1	22					2	16	2	40	3	17	3	33	31

Adding	h	m
For Fowey, Loo *and* Plymouth	3	10
Dartmouth, Harborough *and* Hull	3	30
Torbay *and* Tinmouth	3	40
Exmouth, Topſham *and* Lime	3	50
Weymouth	4	20
Bridgewater *and* Texel	4	40
Portland and Hartflew	5	50

Time of High-Water at LONDON in the morning and afternoon of every day in the year.

Mo. Days	SEPTEMBER morn. h	m	aftern. h	m	OCTOBER morn. h	m	aftern. h	m	NOVEMBER morn. h	m	aftern. h	m	DECEMBER morn. h	m	aftern. h	m	Mo. Days
1	3	50	4	5	4	19	4	40	5	48	6	15	6	17	6	44	1
2	4	24	4	45	5	2	5	26	6	44	7	14	7	10	7	35	2
3	5	6	5	28	5	51	6	23	7	44	8	15	8	5	8	35	3
4	5	54	6	23	6	54	7	25	8	47	9	21	9	5	9	35	4
5	6	52	7	22	7	59	8	35	9	43	10	24	10	4	10	33	5
6	7	58	8	36	9	10	9	45	10	54	11	23	11	1	11	29	6
7	9	15	9	55	10	19	10	52	11	51			11	56			7
8	10	32	11	6	11	22	11	54	0	17	0	42	0	23	0	49	8
9	11	40					0	22	1	5	1	29	1	13	1	37	9
10	0	12	0	42	0	48	1	17	1	51	2	14	2	0	2	22	10
11	1	8	1	34	1	36	2	0	2	30	2	53	2	43	3	1	11
12	1	58	2	22	2	23	2	42	3	9	3	25	3	16	3	32	12
13	2	44	3	1	2	59	3	15	3	41	3	55	3	46	4	1	13
14	3	16	3	31	3	29	3	44	4	9	4	27	4	16	4	33	14
15	3	46	4	1	3	59	4	15	4	46	5	4	4	51	5	8	15
16	4	15	4	32	4	32	4	50	5	22	5	43	5	26	5	48	16
17	4	51	5	8	5	8	5	28	6	5	6	29	6	10	6	34	17
18	5	26	5	47	5	49	6	13	6	53	7	19	6	59	7	25	18
19	6	11	6	36	6	37	7	3	7	46	8	16	7	53	8	24	19
20	7	2	7	29	7	30	7	59	8	47	9	19	8	57	9	31	20
21	7	58	8	29	8	29	9	0	9	51	10	23	10	7	10	43	21
22	9	1	9	33	9	32	10	5	10	56	11	30	11	19	11	55	22
23	10	7	10	38	10	38	11	10			0	4			0	30	23
24	11	9	11	40	11	41			0	35	1	5	1	3	1	35	24
25			0	11	0	11	0	40	1	36	2	7	2	6	2	36	25
26	0	39	1	5	1	8	1	35	2	34	2	59	3	0	3	20	26
27	2	31	1	57	2	3	2	32	3	20	3	40	3	39	3	57	27
28	2	22	2	47	2	58	3	14	4	0	4	19	4	17	4	36	28
29	3	5	3	24	3	33	3	57	4	42	5	5	4	56	5	15	29
30	3	42	3	59	4	14	4	35	5	28	5	51	5	37	5	58	30
31					4	58	5	21					6	22	6	46	31

Subtracting	h	m
For Leigh, Maes, *and* Gouries Gut	0	5
Graveſend, Rocheſter, *and* Rammekins	1	20
Buoy of the Nore *and* Fluſhing	1	30
Portſmouth, Oſtend, Shoe-Becon, *and* Red-Sand	2	0
Harwich, Dover, Spithead, *and* Calais	3	0
Gunfleet, Haſtings, Shoreham, Orfordneſs, *and* Diep	4	0
Yarmouth Pier *and* Needle	4	40
St. Helen's *and* Havre-de-Grace	5	30

The Eclipſes of Jupiter's

JANUARY				FEBRUARY				MARCH				APRIL			
Immerſions				Immerſions				Immerſions				Emerſions			
1	23	44	56	1	1	38	5	1	9	14	43	2	8	9	11
3	18	12	30	2	20	6	17	3	3	43	35	4	2	38	16
5	12	40	6	4	14	34	31	4	22	12	30	5	21	7	2
7	7	7	42	6	9	2	49	6	16	41	27	7	15	36	28
9	1	35	21	8	3	31	10	8	11	10	21	9	10	5	34
10	20	2	59	9	21	59	34	10	5	39	22	11	4	34	37
12	14	30	41	11	16	28	0	12	0	8	19	12	23	3	41
14	8	58	26	13	10	56	29	13	18	37	24	14	17	32	4
16	3	26	15	15	5	25	1	15	13	6	23	16	12	1	46
17	21	54	2	16	23	53	36	Emerſions				18	6	30	47
19	16	21	53	18	18	22	14	17	9	47	22	20	0	59	5
21	10	49	46	20	12	50	52	19	4	16	23	21	19	28	48
23	5	17	43	22	7	19	32	20	22	45	27	23	13	57	47
24	23	45	42	24	1	48	17	22	17	14	33	25	8	26	4
26	18	13	43	25	20	17	3	24	11	43	39	27	2	55	4
28	12	41	48	27	14	45	51	26	6	12	42	28	21	24	3
30	7	9	56					28	0	41	50	30	15	53	3
								29	19	10	54				
								31	13	40	2				

MAY				JUNE				JULY				AUGUST			
Emerſions				Emerſions				Emerſions				Emerſions			
2	10	22	21	1	12	28	29	1	14	29	23	2	11	1	5
4	4	51	12	3	6	56	53	3	8	57	41	4	5	30	3
5	23	19	58	5	1	25	17	5	3	26	0	5	23	59	1
7	17	48	44	6	19	53	36	6	21	54	19	7	18	28	
9	12	17	30	8	14	21	55	8	16	22	39	9	12	56	5
11	6	46	12	10	8	50	9	10	10	51	0	11	7	25	4
13	1	14	53	12	3	18	27	12	5	19	25	13	1	54	3
14	19	43	33	13	21	46	46	13	23	47	48	14	20	23	2
16	14	12	10	15	16	15	2	15	18	16	13	16	14	52	2
18	8	40	45	17	10	43	20	17	12	44	40	18	9	21	1
20	3	9	19	19	5	11	37	19	7	13	9	20	3	50	1
21	21	37	52	20	23	39	52	21	1	41	37	21	22	19	1
23	16	6	23	22	18	8	10	22	20	10	10	23	16	48	1
25	10	34	51	24	12	36	25	24	14	38	42	25	11	17	1
27	5	3	18	26	7	4	38	26	9	7	16	27	5	46	1
28	23	31	42	28	1	32	51	28	3	35	50	29	0	15	1
30	18	0	6	29	20	1	3	29	22	4	29	30	18	44	2
								31	16	33	8				

firſt Satellite for 1791.

SEPTEMBER	OCTOBER	NOVEMBER				DECEMBER			
	Immerſions	Immerſions				Immerſions			
The Eclipſes of Jupiter's Satellites will not be viſible this month, Jupiter being too near the Sun.	The Eclipſes of Jupiter's Satellites will not be viſible this Month, Jupiter being too near the Sun.	2	9	55	44	2	11	52	9
		4	4	24	6	4	6	19	49
		5	22	52	28	6	0	47	26
		7	17	20	46	7	19	15	0
		9	11	49	0	9	13	42	33
		11	6	17	12	11	8	10	6
		13	0	45	23	13	2	37	38
		14	19	13	28	14	21	5	9
		16	13	41	34	16	15	32	39
		18	8	9	34	18	10	0	7
		20	2	37	32	20	4	27	36
		21	21	5	26	21	22	55	4
		23	15	33	19	23	17	22	32
		25	10	1	10	25	11	50	0
		27	4	28	58	27	6	17	29
		28	22	56	45	29	0	44	58
		30	17	24	27	30	19	12	27

The Times of the Eclipſes contained in this Table, are adapted to the Meridian of the Royal Obſervatory at Greenwich, and afford an excellent Method to diſcover the Longitude, or Difference of Meridians, between that and any other Place; which I ſhall illuſtrate by an EXAMPLE;

Suppoſe on the 25th Day of December of this Year, the Time of the Immerſion of Jupiter's firſt Satellite be obſerved (by a Teleſcope) in an unknown Meridian, to happen at 13 h. 38 min. 20 ſec.; I find by the Table, that the Time of this Immerſion will happen at the Britiſh Obſervatory, at 11 h. 50 min. 00 ſec. the ſame day: The Difference of the Times is 1 hour 48 min. 20 ſec. which being converted into Degrees and Minutes of the Equator, will make 27 deg. 5 min. the Longitude of the Place of Obſervation, to the Eaſt, becauſe the Time is more than that at the Britiſh Obſervatory.

Speculum Phænomenorum

JANUARY

1	☌ ☉ ♀ 16h.
4	☌ ♀ ☾ 6h.
5	☌ ☿ ☾ 4h.
5	☌ ♂ ☾ 6h.
9	☌ ♄ ☾ 22h.
13	☾ in apogeo
16	♃ ſtationary
18	♀ in aphelion
19	☿ elong. max.
19	☉ in ♒ 12h. 19m
24	☌ ♃ ☾ 6h.
25	☿ ſtationary
27	☾ in perigeo
31	☍ ☉ ♅ 13h.

FEBRUARY

2	☌ ☿ ☾ 19h.
3	☌ ☉ ☿ 0h.
3	☌ ♂ ☾ 7h.
3	☌ ♀ ☾ 9h.
6	☌ ♄ ☾ 12h.
10	☾ in apogeo
13	♂ in perihelio
15	☿ ſtationary
18	☉ in ♓ 3h. 9m.
20	☌ ♃ ☾ 11h.
23	☾ in perigeo

MARCH

1	☿ elong. max.
2	☌ ☿ ☾ 2h.
4	☌ ♂ ☾ 10h.
5	☌ ♀ ☾ 16h.
6	☌ ♄ ☾ 2h.
7	☌ ☉ ♂ 14h.
9	☿ in aphelio
10	☾ in apogeo
16	☍ ☉ ♃ 19 h.
19	☌ ♃ ☾ 15h.
20	☉ in ♈ 3h. 34m.
23	☽ in perigeo
29	☌ ☉ ♄ 1h.

APRIL

2	☌ ☿ ☾ 0h.
2	☌ ♂ ☾ 13h.
2	☌ ♄ ☾ 16h
3	☉ eclipſed, viſib.
5	☌ ♀ ☽ 2h.
6	☾ in apogeo
13	☌ ☉ ☿ 13h.
15	☌ ♃ ☾ 19h.
18	☽ eclipſed, inviſ.
19	☉ in ♉ 16h. 18m.
19	☾ in perigeo
30	☌ ♄ ☾ 4h.
30	□ ☉ ♅ 4h.

MAY

1	☌ ♂ ☾ 15h.
3	☾ in apogeo
4	☌ ☿ ☾ 14h.
5	☌ ♀ ☾ 11h.
11	♀ in perihelio
12	☿ elong. max.
13	☌ ♃ ☾ 3h.
17	☾ in perigeo
18	♃ ſtationary
20	☉ in ♊ 16h. 54m.
24	☿ ſtationary
26	☿ in ♉
27	☌ ♄ ☽ 16h.
28	☾ in apogeo
30	☌ ♂ ☾ 17h.
31	☾ in apogeo

JUNE

1	☌ ☿ ☾ 20h.
4	☌ ♀ ☾ 16h.
5	☌ ☉ ☿ 1h.
5	☿ in aphelio
9	☌ ♃ ☾ 12h.
13	□ ☉ ♃ 8h.
15	☾ in perigeo
16	♂ in ♌
17	☿ ſtationary
21	☉ in ♋ 1h. 37m.
24	☌ ♄ ☾ 4h.
27	☾ in apogeo
28	☌ ♂ ☾ 17h.
29	☌ ☿ ☽ 1h.
29	☿ elong. max.

ad Annum 1791.

	JULY
4	☌ ♀ ☾ 16h.
6	☌ ♃ ☾ 22h.
0	□ ☉ ♄ 13h.
2	☾ in perigeo
4	☿ in ☊
8	☿ in perihelio
1	☌ ♄ ☾ 12h.
2	☉ in ♌ 12h. 27m.
5	☾ in apogeo
7	☌ ☉ ☿ 2h.
7	☌ ♂ ☾ 14h.
28	♀ in ☋
30	☌ ☿ ☾ 21h.
31	♄ ſtationary

	AUGUST
3	☌ ♀ ☾ 7h.
3	☌ ♃ ☾ 11h.
6	☌ ☉ ♅ 19h.
9	☾ in perigeo
10	♀ elong. max.
17	☌ ♄ ☾ 19h.
21	☿ in ☋
22	☉ in ♍ 18h. 48m.
22	☾ in apogeo
25	☌ ♂ ☾ 12h.
31	☌ ☿ ☾ 0h.
31	☌ ♃ ☾ 3h.
31	☿ in aphelio

	SEPTEMBER
1	☌ ♀ ☾ 10h.
1	☿ in aphelio
4	☾ in perigeo
7	☿ elong. max.
14	☌ ♄ ☾ 3h.
18	☾ in apogeo
21	☿ ſtationary
22	☉ in ♎ 15h. 15m.
23	☌ ♂ ☾ 7h.
24	♃ in aphelio
27	☉ eclipſed, inviſ.
27	☌ ♃ ☾ 21h.
28	☌ ☿ ☾ 9h.
28	♀ ſtationary
29	☌ ♀ ☾ 12h.
30	☾ in perigeo

	OCTOBER
4	☌ ☉ ☿ 4h.
4	☌ ☉ ♃ 19h.
8	☍ ☉ ♄ 8h.
10	☿ in perihelio
11	☌ ♄ ☾ 7h.
11	☾ eclipſed, viſib.
13	☿ ſtationary
16	☾ in apogeo
18	☿ elong. max.
19	☌ ☉ ♀ 6h.
22	☌ ♂ ☾ 0h.
22	☉ in ♏ 23h. 11m.
25	☌ ♃ ☾ 17h.
25	☌ ☿ ☾ 17h.
26	☌ ♀ ☾ 3h.
28	☾ in perigeo

	NOVEMBER
7	☌ ♄ ☾ 10h.
9	♀ ſtationary
10	□ ☉ ♅ 21h.
12	☾ in apogeo
18	♀ in ☊
19	☌ ♂ ☾ 13h.
21	☉ in ♐ 19h. 24m.
22	☌ ♀ ☾ 13h.
22	☌ ♃ ☾ 14h.
23	☌ ☉ ☿ 3h.
25	☌ ☿ ☾ 12h.
26	☾ in perigeo
27	☿ in aphelio

	DECEMBER
4	☌ ♄ ☾ 13h.
10	☾ in apogeo
13	□ ☉ ♂ 3h.
15	♄ ſtationary
17	☌ ♂ ☾ 21h.
20	☌ ♃ ☾ 8h.
21	☉ in ♑ 7h. 46m.
21	☌ ♀ ☾ 12h.
21	♀ in perihelio
24	☾ in perigeo
26	☌ ☿ ☾ 1h.
29	♀ elong. max.
31	☌ ♄ ☾ 20h.

A Table of the Sun's ſemi-diurnal Arches, or Times

The Sun's Declination North.

Degr.	Lat. 49		Lat. 50		Lat. 51		Lat. 52		Lat. 53		Lat. 5	
	h	m	h	m	h	m	h	m	h	m	h	
0	6	4	6	4	6	4	6	4	6	4	6	
1	6	8	6	8	6	8	6	9	6	9	6	
2	6	12	6	13	6	13	6	14	6	14	6	
3	6	17	6	18	6	18	6	19	6	19	6	
4	6	22	6	22	6	22	6	24	6	25	6	
5	6	26	6	27	6	27	6	29	6	30	6	
6	6	31	6	32	6	33	6	34	6	36	6	
7	6	36	6	37	6	38	6	40	6	41	6	
8	6	41	6	42	6	43	6	45	6	47	6	
9	6	45	6	47	6	48	6	50	6	52	6	
10	6	50	6	52	6	54	6	56	6	58	7	
11	6	55	6	57	6	59	7	1	7	3	7	
12	7	0	7	2	7	4	7	7	7	9	7	
13	7	5	7	7	7	10	7	12	7	15	7	
14	7	10	7	13	7	15	7	18	7	21	7	
15	7	15	7	18	7	21	7	24	7	27	7	
16	7	21	7	24	7	27	7	30	7	33	7	
17	7	26	7	29	7	33	7	36	7	40	7	
18	7	31	7	35	7	38	7	42	7	46	7	
19	7	37	7	41	7	45	7	49	7	53	7	
20	7	43	7	47	7	51	7	55	8	0	8	
21	7	49	7	53	7	57	8	2	8	7	8	
22	7	55	7	59	8	4	8	9	8	14	8	
23	8	1	8	6	8	11	8	16	8	22	8	
24	8	7	8	12	8	18	8	24	8	30	8	

By theſe Tables the Times of the Sun's Riſing and Settin may be found, in any Part of the Kingdom of *Great-Brita* or *Ireland*, after the following Manner: Where the Latitud of the Place is known, take the Sun's Declination out the Table, on the Noon of the Day you deſire to kno the Time of his Riſing and Setting; and with it, accord ing as it is either North or South, enter theſe Tables in th

Left

of his viſible half Duration above the Horizon.

The Sun's Declination South.

Degr	Lat. 49		Lat. 50		Lat. 51		Lat. 52		Lat. 53		Lat. 54	
	h	m	h	m	h	m	h	m	h	m	h	m
0	6	4	6	4	6	4	6	4	6	4	6	4
1	5	59	5	59	5	58	5	58	5	58	5	58
2	5	54	5	54	5	53	5	53	5	53	5	53
3	5	49	5	49	5	49	5	48	5	48	5	47
4	5	45	5	44	5	44	5	43	5	42	5	42
5	5	40	5	39	5	39	5	38	5	37	5	36
6	5	35	5	35	5	34	5	33	5	31	5	30
7	5	31	5	30	5	29	5	27	5	26	5	25
8	5	26	5	25	5	23	5	22	5	21	5	19
9	5	21	5	20	5	18	5	17	5	16	5	13
10	5	17	5	15	5	13	5	11	5	10	5	8
11	5	12	5	10	5	8	5	6	5	4	5	2
12	5	7	5	5	5	3	5	0	4	58	4	56
13	5	2	5	0	4	57	4	55	4	52	4	50
14	4	57	4	54	4	52	4	49	4	47	4	44
15	4	52	4	49	4	46	4	44	4	41	4	37
16	4	46	4	45	4	41	4	38	4	34	4	31
17	4	41	4	38	4	35	4	32	4	28	4	23
18	4	36	4	33	4	29	4	26	4	22	4	18
19	4	30	4	27	4	23	4	19	4	15	4	11
20	4	25	4	21	4	17	4	13	4	9	4	4
21	4	19	4	15	4	11	4	6	4	2	3	57
22	4	13	4	9	4	4	4	0	3	55	3	50
23	4	7	4	3	3	58	3	53	3	47	3	42
24	4	1	3	56	3	51	3	46	3	40	3	34

eft-hand Column, under the Word Degrees; then look he Latitude of the Place in the Top of the Table; and in hat Column, againſt the Sun's Declination, will be found the Time of his viſible half Duration above the Horizon, or Time of his Setting, correct by Refraction; then ſubtract he Time of his Setting from 12 Hours, the Remainder will e the Time of his Riſing; double the Time of his Setting, the

A Table of the Sun's ſemi-diurnal Arches, or Times

The Sun's Declination North.

Degr.	Lat. 55		Lat. 56		Lat. 57		Lat. 58		Lat. 59		Lat. 6	
	h	m	h	m	h	m	h	m	h	m	h	
0	6	4	6	4	6	4	6	4	6	4	6	
1	6	9	6	10	6	10	6	10	6	11	6	
2	6	15	6	16	6	16	6	17	6	17	6	
3	6	21	6	22	6	22	6	23	6	24	6	
4	6	27	6	28	6	29	6	30	6	3	6	
5	6	32	6	34	6	35	6	36	6	38	6	
6	6	38	6	40	6	41	6	43	6	44	6	
7	6	44	6	46	6	48	6	49	6	51	6	
8	6	50	6	52	6	54	6	56	6	58	7	
9	6	56	6	58	7	1	7	3	7	5	7	
10	7	2	7	5	7	7	7	10	7	13	7	
11	7	8	7	10	7	14	7	17	7	20	7	
12	7	15	7	18	7	21	7	34	7	27	7	
13	7	21	7	24	7	28	7	31	7	35	7	
14	7	28	7	31	7	35	7	39	7	43	7	
15	7	34	7	39	7	42	7	46	7	51	7	
16	7	41	7	45	7	49	7	54	7	59	8	
17	7	48	7	52	7	57	8	1	8	7	8	
18	7	55	8	0	8	5	8	10	8	16	8	
19	8	2	8	7	8	13	8	19	8	25	8	
20	8	10	8	15	8	21	8	28	8	35	8	
21	8	18	8	24	8	30	8	37	8	45	8	
22	8	26	8	32	8	39	8	47	8	55	9	
23	8	34	8	41	8	49	8	57	9	6	9	
24	8	43	8	51	8	59	9	8	9	18	9	

the Sum will be the Length of the Day ; and double the Tim of his Riſing, the Sum will be the Length of the Nigh But if the Latitude of the Place, and Declination of the Su conſiſt of Degrees and Minutes, then a ſmall Allowance mu be made for the Minutes in both Caſes, which may be do by a Perſon of an ordinary Capacity by a mental Proporti only. Thus, to find the Time of the Sun's Riſing and Setti

of his viſible half Duration above the Horizon.

The Sun's Declination South.

Lat. 55		Lat. 56		Lat. 57		Lat. 58		Lat. 59		Lat. 60	
h	m	h	m	h	m	h	m	h	m	h	m
6	4	6	4	6	4	6	4	6	4	6	4
5	58	5	58	5	58	5	58	5	57	5	57
5	52	5	52	5	52	5	51	5	51	5	50
5	47	5	46	5	45	5	45	5	44	5	43
5	41	5	40	5	39	5	38	5	37	5	36
5	35	5	34	5	33	5	32	5	31	5	29
5	29	5	28	5	27	5	25	5	24	5	22
5	23	5	22	5	20	5	19	5	17	5	15
5	17	5	16	5	14	5	12	5	10	5	8
5	12	5	10	5	8	5	5	5	3	5	2
5	5	5	3	5	1	4	59	4	56	4	53
4	59	4	57	4	54	4	52	4	49	4	46
4	53	4	51	4	48	4	45	4	42	4	38
4	47	4	44	4	41	4	38	4	34	4	30
4	41	4	37	4	34	4	30	4	27	4	23
4	34	4	31	4	27	4	23	4	19	4	14
4	27	4	24	4	20	4	15	4	11	4	6
4	21	4	17	4	12	4	8	4	3	3	57
4	14	4	9	4	5	4	0	3	54	3	48
4	7	4	2	3	56	3	51	3	45	3	39
3	59	3	54	3	49	3	43	3	36	3	29
3	52	3	46	3	40	3	34	3	27	3	19
3	44	3	38	3	31	3	24	3	17	3	9
3	36	3	29	3	23	3	15	3	6	2	57
3	27	3	20	3	13	3	5	2	55	2	45

Aberdeen in Scotland, on the Longeſt Day ; the Latitude of that Place is counted 57 Degr. 7 Min. North, and the Sun's Declination 23 Deg. 28 in. likewiſe North. By theſe you will find by the Table, that 5 Min. for e Sun's Declination, and 1 Min. for the Latitude of the Place, are both, be added to 8 Hours 49 Min. the Time belonging to 57 Degr. of Latitude d 23 Degr. of North Declination, and the Sum will be 8 Hours 55 Min. e Time of his apparent Setting at Aberdeen, on the longeſt Day, whoſe omplement to 12 Hours, viz. 3 Hours 5 Min. will be the Time of his ſing, &c.

A Table of the Sun's Right-Aſcenſion in Time, the greateſt

Degr.	♈			♉			♊			♋			♌			♍	
	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s	h	m
0	0	0	0	1	51	37	3	51	15	6	0	0	8	8	45	10	8
1	0	3	40	1	55	27	3	55	25	6	4	22	8	12	54	10	12
2	0	7	20	1	59	17	3	59	36	6	8	43	8	17	3	10	16
3	0	11	0	2	3	8	4	3	48	6	13	5	8	21	11	10	19
4	0	14	41	2	6	59	4	8	0	6	17	26	8	25	19	10	23
5	0	18	21	2	10	51	4	12	13	6	21	48	8	29	26	10	27
6	0	22	2	2	14	44	4	16	26	6	26	9	8	33	31	10	31
7	0	25	42	2	18	37	4	20	40	6	30	30	8	37	37	10	34
8	0	29	23	2	22	31	4	24	55	6	34	51	8	41	41	10	38
9	0	33	4	2	26	25	4	29	10	6	39	11	8	45	45	10	42
10	0	36	45	2	30	20	4	33	26	6	43	31	8	49	48	10	46
11	0	40	26	2	34	16	4	37	42	6	47	51	8	53	51	10	49
12	0	44	8	2	38	13	4	41	59	6	52	11	8	57	52	10	53
13	0	47	50	2	42	10	4	46	16	6	56	31	9	1	53	10	57
14	0	51	32	2	46	8	4	50	34	7	0	50	9	5	53	11	1
15	0	55	14	2	50	7	4	54	52	7	5	8	9	9	53	11	4
16	0	58	5	2	54	7	4	59	10	7	9	26	9	13	52	11	8
17	1	2	40	2	58	7	5	3	29	7	13	44	9	17	50	11	12
18	1	6	23	3	2	8	5	7	49	7	18	1	9	21	47	11	15
19	1	10	7	3	6	9	5	12	9	7	22	18	9	25	44	11	19
20	1	13	51	3	10	12	5	16	29	7	26	34	9	29	40	11	23
21	1	17	35	3	14	15	5	20	49	7	30	50	9	33	35	11	26
22	1	21	20	3	18	19	5	25	9	7	35	5	9	37	29	11	30
23	1	25	6	3	22	23	5	29	30	7	39	20	9	41	23	11	34
24	1	28	52	3	26	29	5	33	51	7	43	34	9	45	16	11	37
25	1	32	38	3	30	35	5	38	12	7	47	47	9	49	9	11	41
26	1	36	25	3	34	41	5	42	34	7	52	0	9	53	1	11	45
27	1	40	12	3	38	49	5	46	55	7	56	12	9	56	52	11	49
28	1	44	0	3	42	57	5	51	17	8	0	24	10	0	43	11	52
29	1	47	48	3	47	6	5	55	38	8	4	35	10	4	33	11	56
30	1	51	37	3	51	15	6	0	0	8	8	45	10	8	23	12	0

The time of the ſouthing or meridian tranſits of the fixed ſtars in pa. 4
may be found thus. On the noon of the day, preceding the night in whi
you want to know the time of the ſouthing of any of thoſe ſtars, find t
Sun's place in the Ephemeris, and with it take out of the above table
right aſcenſion in time; this you may do by inſpection to a minute, whi
will be ſufficient for your preſent purpoſe: Then from the right-aſcenſion
the ſtar in pa. 46, ſubtract the right-aſcenſion of the Sun, the remaind
will be the eſtimate time of the ſtar's ſouthing, and will not differ from t
true time above 2 or 3 minutes at moſt, which may be near enough for or
nary uſes. But when great exactneſs is required, reduce the Sun's place
this eſtimate time, and with it find in the above table his right aſcenſion
ſeconds, which being ſubtracted from that of the ſtar, the remainder will

Obliquity of the Ecliptic being 23° 28′.

♎			♏			♐			♑			♒			♓		
h	m	s	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s
12	0	0	13	51	37	15	51	15	18	0	0	20	8	45	22	8	23
12	3	40	13	55	27	15	55	25	18	4	22	20	12	54	22	12	12
12	7	20	13	59	17	15	59	36	18	8	43	20	17	3	22	16	0
12	11	0	14	3	8	16	3	48	18	13	5	20	21	11	22	19	48
12	14	41	14	6	59	16	7	0	18	17	26	20	25	19	22	23	35
12	18	21	14	10	51	16	12	13	18	21	48	20	29	26	22	27	22
12	22	2	14	14	44	16	16	26	18	26	9	20	33	31	22	31	8
12	25	42	14	18	37	16	20	40	18	30	30	20	37	37	22	34	54
12	29	23	14	22	31	16	24	55	18	34	51	20	41	41	22	38	40
12	33	4	14	26	25	16	29	10	18	39	11	20	45	45	22	42	25
12	36	45	14	30	20	16	33	26	18	43	31	20	49	48	22	46	9
12	40	26	14	34	16	16	37	42	18	47	51	20	53	51	22	49	53
12	44	8	14	38	13	16	41	59	18	52	11	20	57	52	22	53	37
12	47	50	14	42	10	16	46	16	18	56	31	21	1	53	22	57	20
12	51	32	14	46	8	16	50	34	19	0	50	21	5	53	23	1	3
12	55	14	14	50	7	16	54	52	19	5	8	21	9	53	23	4	46
12	58	57	14	54	7	16	59	10	19	9	26	21	13	52	23	8	28
13	2	40	14	58	7	17	3	29	19	13	44	21	17	50	23	12	10
13	6	23	15	2	8	17	7	49	19	18	1	21	21	47	23	15	52
13	10	7	15	6	9	17	12	9	19	22	18	21	25	44	23	19	34
13	13	51	15	10	12	17	16	29	19	26	34	21	29	40	23	23	15
13	17	35	15	14	15	17	20	49	19	30	50	21	33	35	23	26	56
13	21	20	15	18	19	17	25	9	19	35	5	21	37	29	23	30	37
13	25	6	15	22	23	17	29	30	19	39	20	21	41	23	23	34	18
13	28	52	15	26	29	17	33	51	19	43	34	21	45	16	23	37	58
13	32	38	15	30	35	17	38	12	19	47	47	21	49	9	23	41	39
13	36	25	15	34	41	17	42	34	19	52	0	21	53	1	23	45	19
13	40	12	15	38	49	17	46	55	19	56	12	21	56	52	23	49	0
13	44	0	15	42	57	17	51	17	20	0	24	22	0	43	23	52	40
13	47	48	15	47	6	17	55	38	20	4	35	22	4	33	23	56	20
13	51	37	15	51	15	18	0	0	20	8	45	22	8	23	24	0	0

he true time of the ſtar's culminat-
ng or ſouthing. And if from the
ime of the ſtar's ſouthing you ſub-
ract the ſemidiurnal arc belonging to
t, the remainder will be the time of
he ſtar's riſing; and being added to
t, the ſum will be the time of its
etting.

Annexed is an Ex. of Sirius for Jan. 31, 1791.

⊙'s place at noon ♒ 11° 40′	h	m	s
Rt. Aſc. of Sirius - -	6	35	58
⊙'s rt. aſc. ſubtract -	20	57	0
✱'s eſtimate ſouthing -	9	38	58
⊙'s rt. aſc. at that time ſub.	20	58	12
✱'s true ſouthing - -	9	37	46
Semid. arc ſub. & add -	4	36	55
✱'s riſing aftern. - -	5	00	51
✱'s ſetting - -	14	14	41

A Table of the mean Right-Aſcenſions in time, Semidurnal-Arcs, Dec
tions, and Magnitudes of 40 remarkable fixed Stars, with their N
and Bayer's Literal Characters, for January 1, 1790.

Names of the Stars	Ch.	Rt. Aſc.			Declination				Semid Ar.		
		h	m	s	°	′	″		h	m	s
Pole ſtar, Alruccabah -	α	0	48	57	88	11	34	n	ſets not		
Andromeda's girdle, Mirach -	β	0	57	48	34	29	47	n	10	7	3
Andromeda's left foot, Almach	γ	1	51	10	41	18	41	n	ſets not		
Ram's following horn -	α	1	55	18	22	27	43	n	8	9	35
Whale's jaw, Menkar -	α	2	51	19	3	15	11	n	6	19	48
Meduſa's head, Algol - -	β	2	54	32	40	7	41	n	ſets not		
Perſeus's right ſide, Algenib	α	3	9	26	49	7	6	n	ſets not		
Brighteſt of the 7 ſtars -	η	3	35	2	23	26	22	n	8	16	40
Bull's ſouth eye, Aldebaran	α	4	23	51	16	4	19	n	7	28	51
Auriga's left ſhoulder, Capella	α	5	1	11	45	46	57	n	ſets not		
Orion's left foot, Rigel -	β	5	4	27	8	27	38	s	5	20	28
Bull's north horn - -	β	5	12	57	28	25	12	n	8	57	1
Orion's left ſhoulder, Bellatrix	γ	5	13	54	6	8	50	n	6	34	41
Orion's girdle - -	ε	5	25	32	1	21	22	s	5	56	42
Orion's right ſhoulder, Betelgeuſe	α	5	43	46	7	21	2	n	6	40	58
In the great Dog's mouth, Sirius	α	6	35	58	16	25	8	s	4	36	55
Head of the 1ſt Twin, Caſtor	α	7	21	11	32	19	57	n	9	38	21
In the leſs Dog's thigh, Procyon	α	7	28	21	5	46	33	n	6	32	50
Head of the 2d Twin, Pollux	β	7	32	30	28	31	19	n	8	58	13
Hydra's heart, Alphard -	α	9	17	15	7	45	30	s	5	24	20
Lyon's heart, Regulus -	α	9	57	11	12	58	43	n	7	11	28
Great Bear, Lower Pointer	β	10	49	4	57	30	19	n	ſets not		
Great Bear, Upper Pointer -	α	10	50	39	62	53	25	n	ſets not		
Lion's tail, Deneb - -	β	11	38	24	15	44	22	n	7	27	18
Great Bear, 1ſt in the tail, Aliath	ε	12	45	5	57	7	0	n	ſets not		
Virgius's ſpike - -	α	13	14	10	10	3	38	s	5	12	20
Dragon's tail - -	α	13	58	42	65	20	53	n	ſets not		
Bootes, Arcturus -	α	14	6	11	20	20	20	n	7	55	25
Libra, Southern Scale - -	α	14	39	22	15	9	30	s	4	44	23
Libra, Northern Scale - -	β	15	5	47	8	36	4	s	5	19	57
Bright ſtar in the North Crown	α	15	25	49	27	25	35	n	8	48	36
Scorpion's heart, Antares	α	16	16	35	25	56	54	s	3	34	6
Hercules's head, Raſ. Algethi	α	17	5	7	14	38	4	n	7	20	41
Head of Serpentarius - -	α	17	25	8	12	43	20	n	7	9	50
Dragon's head, Raſtaben -	γ	17	51	51	51	31	28	n	ſets not		
Bright ſtar in the Harp, Lyra	α	18	29	45	38	35	39	n	ſets not		
Bright ſtar in the Eagle, Atair	α	19	40	25	8	18	55	n	6	45	57
Mouth of ſouth Fiſh, Fomalhaut	α	22	45	53	30	43	12	s	2	52	6
Pegaſus's wing, Markab -	α	22	54	15	14	4	11	n	7	17	10
Andromeda's head - -	α	23	57	29	27	55	38	n	8	52	19

Table of the Longitudes, Latitudes, and Magnitudes of the moſt remarkable fixed Stars that the Moon can Eclipſe, or make a near Appulſe unto; exactly rectified to the beginning of the year 1790.

	Cha.	Long.			Lat.				Mag.	Con.	Cha.	Long.			Lat.				Mag.
		°	′	″	°	′	″					°	′	″	°	′	″		
	δ	♈ 11	13	11	2	9	44	n	4	♎	α	♏ 12	9	29	0	21	48	n	2
	ε	14	36	25	1	5	37	n	4		12	18	4	37	1	49	14	s	3
	ζ	16	56	25	0	13	11	s	4		γ	22	12	9	4	24	41	n	3
	δ	♉ 17	54	44	1	48	7	n	4		η	24	26	33	4	2	52	n	4
	η	27	3	44	4	1	36	n	3		κ	24	49	47	0	1	1	n	4
	γ	♊ 2	52	0	5	45	30	s	3		θ	26	56	12	3	29	24	n	4
	ε	5	31	37	2	35	37	s	3		λ	27	32	46	0	6	53	n	4
	α	6	51	20	5	29	2	s	1	♏	δ	29	38	28	1	57	17	s	3
	β	19	38	37	5	21	59	n	2		π	♐ 0	0	35	5	26	15	s	3
	ζ	21	51	15	2	13	29	s	3		β	0	15	33	1	2	18	n	2
II	η	♋ 0	30	37	0	55	4	s	4		ν	1	42	50	1	39	52	n	4
	μ	2	22	2	0	50	34	s	3		σ	4	52	13	4	0	23	s	4
	γ	5	10	20	6	46	12	s	2		α	6	49	58	4	32	17	s	1
	ε	7	0	30	2	2	28	n	3		τ	8	31	42	6	5	21	s	4
	δ	15	35	29	0	12	19	s	3	♐	γ	28	20	3	6	56	48	s	3
	β	20	19	34	6	40	4	n	1		μ	♑ 0	16	58	2	22	24	n	4
♋	γ	♌ 4	36	51	3	10	22	n	4			3	23	31	2	5	31	s	4
	δ	5	47	9	0	4	13	n	4		λ	7	14	48	3	55	22	s	3
♌	ξ	18	43	23	3	1	57	s	4		σ	9	27	17	3	24	55	s	3
	ο	21	19	38	3	46	1	s	4		τ	11	54	32	5	2	33	s	3
	η	24	58	23	4	51	9	n	4		ο	12	3	36	0	53	36	n	3
	α	26	54	49	0	27	27	n	1		π	13	19	21	1	28	7	n	4
	ρ	♍ 3	27	25	0	8	29	n	4	♑	β	♒ 1	6	55	4	36	46	n	3
	τ	18	34	47	0	31	21	s	4		ε	17	16	0	4	57	31	s	4
	υ	22	6	32	3	2	51	s	4		γ	18	50	53	2	32	6	s	4
♍	β	24	10	47	0	41	36	n	3		δ	20	36	5	7	33	40	s	3
	ο	♎ 0	26	10	5	4	42	n	3	♒	ι	25	47	17	2	3	47	s	4
	η	1	54	16	1	22	24	n	3		θ	♓ 0	19	42	2	43	22	n	4
	ν	7	14	41	2	48	57	n	3		λ	8	38	43	0	22	57	s	4
	α	20	54	50	2	2	11	s	1		ο	14	12	30	1	2	8	s	4

This table ſhewing the mean longitudes of 60 ſtars to the beginning of the year 1790, their mean longitudes for any other time may be found if $50\frac{1}{3}$ ſeconds be added for each ſucceeding, and ſubtracted for each preceding year, and proportionably for a part of a year. Thus, to find the longitude of the firſt ſtar ♓ δ, or δ piſcium, for Feb. 15, 1792, or 2 years and one eighth after the tabular time; here $2\frac{1}{8}$ times $50\frac{1}{3}$ ſec. make 1′ 47″, which being added to the tabular longitude, gives ♈ 11° 14′ 58″ for the longitude required at the given time.——The latitudes vary not.

The Latitudes and Longitudes of Ninety Places.

	Lat.	Long.		Lat.	Lo
	° '	° '		° '	°
Alexandria, Egypt	31 11 n	30 17 e	Iſpahan	32 25 n	52
Amſterdam, Hol.	52 23 n	4 52 e	Land's end	50 6 n	5
Archangel, Ruſ.	64 34 n	38 30 e	Leghorn	43 33 n	10
Athens	37 40 n	23 52 e	Leoſtoff	52 38 n	1
Babelmandel	12 50 n	43 50 e	Leverpool	53 22 n	3
Batavia	6 12 s	106 45 e	Lima	12 1 s	76
Bengal	22 0 n	92 45 e	Liſbon	38 42 n	9
Berlin	52 33 n	13 26 e	Lizard	49 57 n	5
Bombay Iſle	19 42 n	73 3 e	London	51 31 n	0
Boſton, Amer.	42 25 n	70 37 w	Madras	13 8 n	80
Breſlau	51 3 n	17 13 e	Madrid	40 25 n	3
Breſt	48 23 n	4 30 w	Manila	14 30 n	120
Briſtol	51 28 n	2 30 w	Marſeilles	43 18 n	5
Buenos Ayres	34 35 s	58 0 w	Mexico	19 54 n	100
Cadiz	36 31 n	6 7 w	Miſſiſſipi, mouth	29 0 n	89
Calais	50 58 n	1 51 e	Moſcow	55 25 n	37
Cairo, Egypt	30 2 n	31 26 e	Naples	40 51 n	14
Cambridge	52 13 n	0 4 e	Newcaſtle	55 0 n	1
Canaria Iſlands	28 1 n	15 0 w	Oporto	40 53 n	8
Canton	23 8 n	113 2 e	Orkney I. northend	59 24 n	3
Cape of Goodhope	34 29 s	18 23 e	Oxford	51 45 n	1
Cape Horn	55 59 s	67 26 w	Paris	48 50 n	2
Carthegena	10 27 n	75 26 w	Pekin	39 55 n	116
Charles Town Am.	33 22 n	79 50 w	Peterſburg	59 56 n	30
Conſtantinople	41 0 n	28 53 e	Philadelphia	39 57 n	75
Copenhagen	55 41 n	12 50 e	Plymouth	50 24 n	4
Corinth	37 30 n	23 0 e	Port Mahon	39 51 n	3 53
Corke	51 54 n	8 30 w	Port Royal, Jam.	17 40 n	76 37
Dantzic	54 22 n	18 36 e	Portſmouth	50 48 n	1
Dover	51 7 n	1 19 e	Prague	50 5 n	14
Dublin	53 12 n	6 55 w	Quebec	46 55 n	71 12
Edinburgh	55 58 n	3 1 w	Rome	41 54 n	12 32
Ferro, Iſle	27 48 n	18 6 w	Scilly Iſles	50 0 n	6 45
Finiſterre, Cape	42 57 n	9 36 w	Smyrna	38 28 n	27 25
Genoa	44 25 n	8 41 e	Stockholm	59 22 n	18 12
Gibraltar	36 5 n	4 46 w	Syracuſe	37 4 n	15 20
Glaſgow	55 52 n	4 5 w	Tangier	35 55 n	5 45
Goa	15 31 n	73 50 e	Teneriff	28 16 n	16 32
Gottingen	51 32 n	9 58 e	Tunis	36 47 n	10 16
Greenwich	51 29 n	0 5 e	Turin	[illegible] 5 n	7 45
Hackluit's Head.	79 55 n	12 0 e	Venice	45 27 n	12 24
Halifax, America	44 46 n	63 20 w	Verd, Cape	14 47 n	17 28
Havanna	23 12 n	81 11 w	Vienna	48 11 n	16 28
Helena, I. St.	15 55 s	5 49 w	Upſal	59 52 n	17 43
Jeruſalem	31 50 n	35 25 e	Uraniberg	55 54 n	12 52

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